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Japanese Nuclear Casualty Data Combined Injury and Mortality Analysis

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13 ABSTRACT *(Maximum 200 words)*

This report is an unclassified, comprehensive summary of the combined injury and mortality analysis and of the LD_{50} determination for human lethal-radiation dose.

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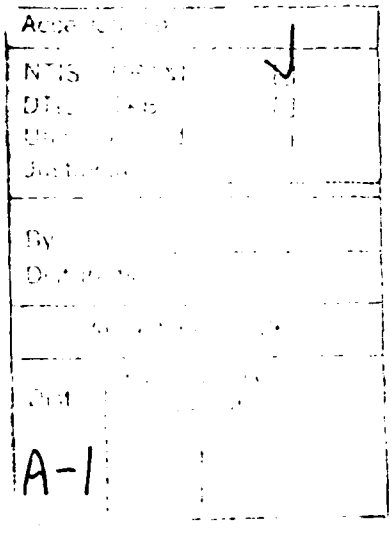
PREFACE

This report summarizes the work performed on Contract DNA001-83-C-0154: Japanese Nuclear Casualty Data. Part I discusses development of the LD_{50} for human lethal-radiation dose. Part II describes effort in developing Combined Injury Analysis.

It is important to recognize that the results presented in Section 2 are preliminary. The combined injury data presented here are based on weapon yield information that has been superseded by the DS86 reassessment. It is expected that definitive results will be provided in a future effort.

Special thanks are extended to Dr. Young and Mr. S. Levin, whose assistance and encouragement were very helpful. In addition the work of Mr. Wayne Rhoades, ORNL, and his associates is gratefully acknowledged. Their continual coordination and attention to detail have been instrumental in the effort to obtain valid LD_{50} results.



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DETERMINATION OF HUMAN LD_{50} FOR PROMPT RADIATION

Human lethal-dose due to radiation has been uncertain for many years. In particular, determination of the LD_{50} (radiation level causing 50 percent mortality) for healthy humans is the goal of the current study. The primary reason for the long-standing uncertainty was the lack of accurate exposure level information for those persons subjected to high levels.

An obvious source of information was those humans present at the explosion of the atomic bombs at Hiroshima and Nagasaki. Casualty data for these events have been available for many years. Almost immediately after the nuclear attacks, the Japanese initiated studies of these events. After the end of World War II, the United States joined in this effort. The casualty data collection was essentially completed within a few months. However, some additional follow-up data were also obtained a year or so later and these data were included with the original information. Additional data collection efforts have continued to the present time in an attempt to improve the determination of the human biological response to nuclear-radiation exposure. Many special studies and surveys of selected buildings, groups of people, and individuals have been done by the Japanese and others. The data base upon which the present study is based is believed to be the most complete available from information available in the United States.

A search of the data base was undertaken to determine those case histories who received significant radiation dose without suffering significant injuries due to blast and/or burns. Generally, those cases situated outside or in wood-frame buildings located in high radiation areas received blast and/or burn injuries; if they were far enough away to escape such injuries, the radiation levels were too low to be of interest for this study.

About 20 years ago, Mr. L. Wayne Davis and his associates at the Dikewood Corporation pointed out the existence of a data source in seismically-reinforced concrete (RC) buildings, and proposed that it be exploited. However, it was not possible at that time to determine radiation levels because no suitable detailed shielding methodology existed to allow estimates inside a reinforced concrete building. In addition, the calculations would have been too lengthy to be undertaken with computers of the day. Both of these problems have recently been overcome. At a meeting in September 1985, personnel from Oak Ridge National Laboratories (ORNL) presented results obtained using the TORT (Three Dimensional Oak Ridge Radiation Transport) code,

showing that detailed calculations of the type needed to obtain the needed radiation levels in RC buildings were feasible.

Attention focused on two seismically-reinforced concrete (RC) buildings in Nagasaki: Chinzei School (Fig 1) and Shiroyama School (Fig 2) in which individuals exposed to high radiation levels were protected from blast (25-28 psi) and burn injuries by the structures (Ref. 1). Figure 3 shows the locations of the two schools relative to the hypo-center. Individuals located in these buildings provided the basis for the LD_{50} study effort described in this report.

Location of personnel was derived from case histories for the occupants of Chinzei and Shiroyama, listed in Tables 1 and 2. Figure 4 shows that the roof of the Chinzei school collapsed, killing all nine persons on the third and fourth floors. Therefore, detailed dose calculations were not made for these floors. The Chinzei School was approximately 500 meters from ground zero and the bomb detonated at about 500 m height, so that the blast and radiation struck the building at about 45 degrees from the northeast. Many persons on the second floor (Fig 5) located closest to ground zero were crushed. Persons located on the basement, first, and second floors of the concrete building who survived the first day with minor burn and blast injuries were used in this LD_{50} study.

The Shiroyama School was about 550 yards from ground zero. Doses were calculated for the 2nd and 3rd floors of building two only, since there were no persons on the first floor. Building #1 to the right of building two (Figure 2) was not included in the study because of the few cases located there. It was used only to calculate the radiation shielding effects on building 2. A considerable number of blast and/or burn injuries were rejected from the cases included in this study.

Factors that could influence the LD_{50} study were examined. They included the following:

- Case history locations--It was necessary to locate each individual prior to calculation of radiation exposure levels. A right-handed coordinate system with the origin at the center of each building was adopted, with positive x defined parallel to the longest dimension of the building and extending toward ground zero. Using the data available, each case history was located on the building plan. Once the best estimate of location was determined, the x and y position was defined using the coordinate system described above. The z-coordinate identifies the body midpoint, taken as 1, 2, or 3 feet above the floor; these values represent prone, sitting, and standing postures, respectively. Positions are summarized in Tables 3 and 4 for those cases used in this study.

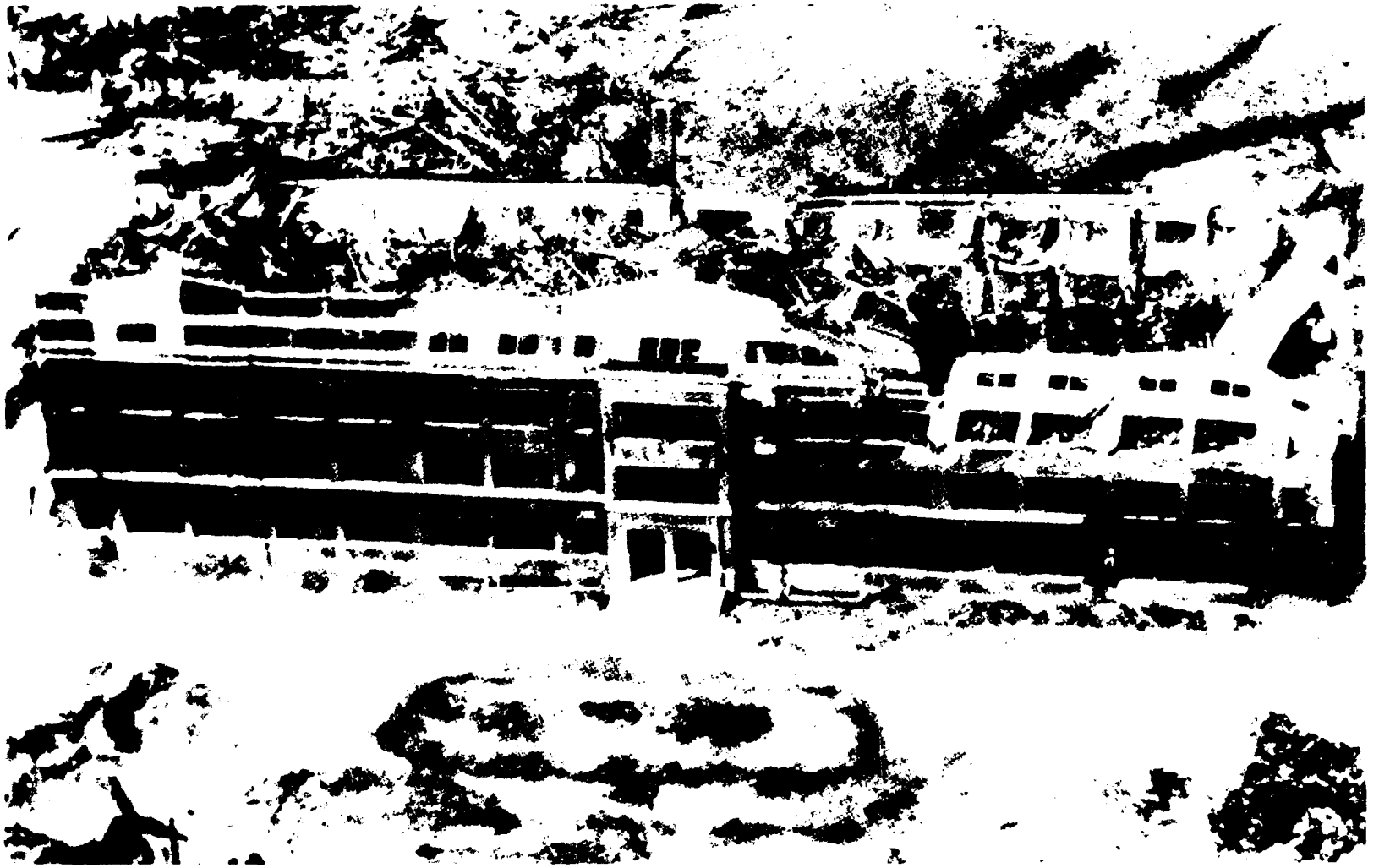

Figure 1. Aerial view of Chinzei school.

BUILDING 2 AT LEFT

Figure 2. Shiroyama school.

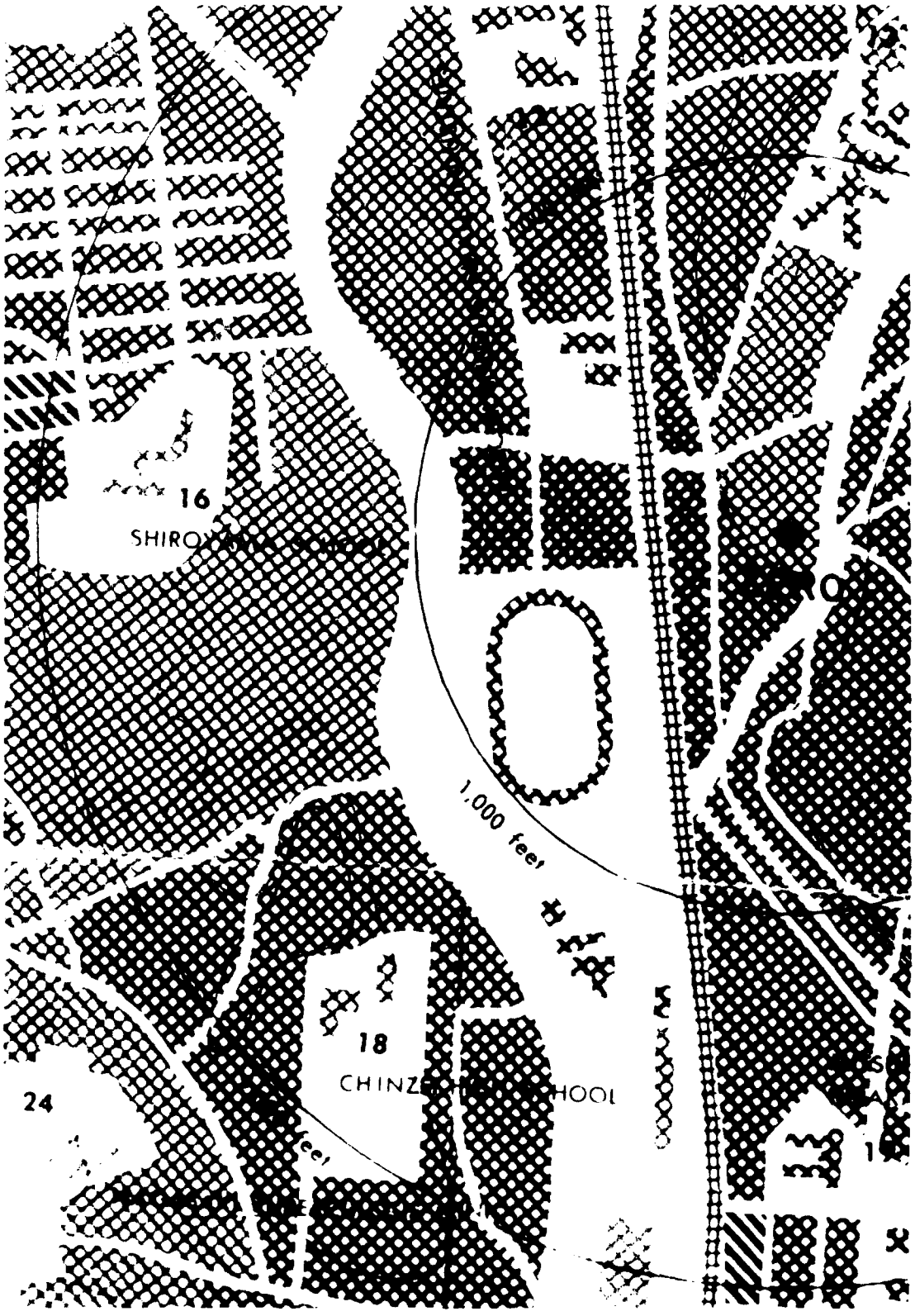

Figure 3. Location of Chinzei and Shiroyama schools relative to hypocenter.

Table 1. Detailed list of all cases.
(Chinzei Middle School)

Case	Room	Sex	Age	Prognosis*	Other remarks
Underground					
1	I	M	19	S	epilation, radiation effect
2	I	M	17	S	wounds on face, arms and thighs slight radiation effect
3	I	F	23	S	epilation, radiation effect
4	I	M	19	S	wound on face, radiation effect
5	I	F	18	M	died on 6th September by radiation
1st floor					
6	II	F	26	M	burn on head died on 12th August
7	II	M	35	I	wounds and burn died at 3 p.m. 9th August
8	II	F	26	I	wounds and slight burn died afternoon of 9th August
9	II	F	18	I	died at 3 p.m. 9th August blast?
10	II	F	18	S	burns on face radiation effect ?
11	II	F	22	M	died afterward radiation effect
12	II	F	23	M	died afterward radiation effect
14	II	F	16	I	blast ? crushed ?
15	II	F	16	I	blast? crushed?
16	II	F	18	M	died after 1.5 months radiation
17	II	F	18	M	died afterwards radiation effect ?
91	III	M	55	I	crushed
92	III	M	15	S	fracture of left leg, radiation ?
18	IV	M	30	M	burn on face, back, arms and hands, died on 3rd September

Table 1. Detailed list of all cases (continued).
(Chinzei Middle School)

Case	Room	Sex	Age	Prognosis*	Other remarks
108	IV	M	15	I	blast
109	IV	M	15	I	blast
110	IV	M	15	I	blast
111	IV	M	15	I	blast
112	IV	M	15	S	wound on head, radiation?
113	IV	M	15	I	blast
114	IV	M	15	I	blast
115	IV	M	15	M	died afterwards, radiation?
116	IV	M	15	I	blast
117	IV	M	15	I	blast
118	IV	M	15	I	blast
101	V	M	19	S	fracture of left leg, radiation?
102	V	M	19	M	wound on head, died after one month by radiation
103	V	M	19	S	epilation, epistaxis wounds on head and shoulder
104	V	M	19	M	diarrhea, died after 7 days
105	V	M	19	M	died afterwards
106	V	M	17	I	died
107	V	M	17	M	died after 7 days, radiation
13	VI	M	26	S	epilation, wound on head radiation
2nd floor					
35	VII	M	20	I	crushed. burned
36	VII	M	29	I	crushed, burned
37	VII	M	24	M	burn on upper half of body, died on 12th August
38	VII	M	20	I	crushed, burned
39	VII	M	24	I	died after 6 hours

Table 1. Detailed list of all cases (continued).
(Chinzei Middle School)

Case	Room	Sex	Age	Prognosis*	Other remarks
32	VIII	M	29	M	burn on upper half of body died on 11th August, radiation
33	VIII	M	19	I	crushed, burned
34	VIII	M	30	I	blast
19	IX	M	33	I	burned, crushed ?
20	IX	M	26	I	burned, crushed ?
21	IX	M	42	I	burned, crushed ?
22	IX	F	20	I	burned, crushed ?
23	IX	F	19	I	burned, crushed ?
24	IX	F	21	I	burned, crushed ?
25	IX	M	27	I	crushed
26	IX	M	27	M	died after 2 weeks, radiation
27	IX	M	38	M	burn on face, back and hands died on 26th August
28	IX	M	31	I	crushed
29	IX	M	21	I	burned, crushed?
30	IX	M	24	M	burns on face, chest, and hands died on 5th September
31	IX	F	16	I	burned, crushed ?
40	X	M	18	M	slight burn, died on 1st September, radiation
41	X	M	19	I	blast ?
42	X	M	18	I	blast ?
43	X	M	19	M	pharyngitis, diarrhea, died on 18th August, radiation
44	X	M	19	I	blast ?
45	X	M	19	I	blast ?
46	XI	M	27	M	burn on face, hands and feet died on 24th August, Radiation
47	XI	F	23	I	crushed

Table 1. Detailed list of all cases (continued).
(Chinzei Middle School)

Case	Room	Sex	Age	Prognosis*	Other remarks
48	XI	M	18	I	crushed
49	XI	M	23	M	burn on whole body, died on 11th August by shock?
50	XI	F	19	I	burned
51	XI	F	19	I	blast ?
52	XI	F	19	I	blast ?
53	XI	F	19	I	blast ?
54	XI	M	24	M	burned, died on 10th August
88	XII	M	65	S	no injury
89	XII	M	35	M	epilation, purpura, pharyngitis died afterward by radiation
90	XII	M	44	M	epilation, purpura, gingivitis died after one month
93	XII	M	41	S	epilation, gingivitis
94	XII	M	48	S	epilation, anemia
95	XII	M	63	S	epilation, pharyngitis
96	XII	M	20	M	epilation, pharyngitis died on 4th September
97	XII	M	47	S	epilation, gingivitis
3rd floor					
55	XIII	M	34	I	blast
56	XIII	M	24	I	blast
57	XIII	M	19	I	blast
58	XIII	F	22	I	blast
59	XIII	M	16	I	blast
60	XIII	F	23	I	blast

Table 1. Detailed list of all cases (continued).
(Chinzei Middle School)

Case	Room	Sex	Age	Prognosis*	Other remarks
4th floor					
98	XIV	M	16	I	bleeding from wound on back, died afterward
99	XIV	M	16	I	crushed
100	XIV	M	16	I	crushed

*Prognosis - Key to Symbols

S - Survived

M - Mortally injured - died within 90 days

I - Immediate death (died on the first day)
Includes those cases that could not be located after the blast.

Table 2. Detailed list of all cases.
(Shiroyama School)

Case	Room	Sex	Age	Prognosis	Other remarks
3rd floor					
S7	I	F	30	I	crushed
S26	I	F	23	I	blast
S33	I	F	22	I	blast
S34	I	F	20	I	corpse unidentified
S41	I	F	23	M	died after a few days
S51	I	F	23	M	died after 5 days
S52	I	F	20	M	died after 10 days by radiation (no wound)
S54	I	F	23	M	died after a few days
S64	I	F	20	I	blast
S97	I	F	16	I	corpse unidentified
S99	I	F	17	I	corpse unidentified
S100	I	F	18	I	corpse unidentified
S113	I	M	19	M	died on 14/VIII by radiation (no wound)
S115	I	M	19	I	corpse unidentified
S116	I	M	19	I	(no data listed)
S5	II	M	27	I	crushed
S42	II	F	21	M	fracture of both legs, died after 10 days by radiation (diarrhea)
S56	II	F	18	M	laceration on scalp, died after a week by radiation
S63	II	F	20	I	blast
S65	II	F	20	M	died on 23/VIII by radiation
S73	II	M	19	M	laceration on scalp died on 10 /VIII
S96	II	F	17	I	corpse undentified
S101	II	F	18	M	died on 27/VIII

Table 2. Detailed list of all cases (continued).
(Shiroyama School)

Case	Room	Sex	Age	Prognosis	Other remarks
S102	II	F	18	I	died after 1 or 2 hours
S114	II	M	18	M	died on 19/VIII by radiation
S6	III	M	46	I	blast
S24	III	F	23	I	blast
S35	III	F	20	I	corpse unidentified
S84	III	F	17	I	corpse unidentified
S94	III	M	18	M	died after 3 days (no wound)
S93	III	M	16	I	contusion on chest, died at 5 o'clock in the afternoon
S110	III	F	15	M	died after 14 days by radiation
S118	III	M	20	M	died on 10/VIII (shock of burn)
S119	III	M	17	I	crushed
S10	IV	M	23	M	died 20/VIII by radiation (purpura, stomatitis)
S17	IV	F	21	M	wound on scalp, died after a week by radiation
S20	IV	F	23	I	blast
S30	IV	F	22	M	wounds on scalp and shoulder died after a week by radiation
S31	IV	F	22	M	wound on leg, died after a week by radiation
S38	IV	F	21	M	(no injuries listed)
S49	IV	F	26	M	much bleeding from wound on scalp died after a week
S53	IV	F	20	M	fracture of leg, died after a week by radiation
S78	IV	F	17	M	burn on extensive area died on 19/VIII
S79	IV	F	17	I	(no injuries listed)
S87	IV	F	16	M	burn on extensive area died on 19/VIII

Table 2. Detailed list of all cases (continued).
(Shiroyama School)

Case	Room	Sex	Age	Prognosis	Other remarks
S88	IV	F	16	M	died on 19/VIII by radiation (no wound)
S109	IV	F	18	M	burn on extensive area
S21	V	F	23	M	died after a week by radiation (no wound)
S23	V	F	23	M	died after a week by radiation
S32	V	F	20	M	died after a week by radiation
S40	V	F	25	M	died after 3 days (rupture of visala in abdomen?)
S44	V	F	20	M	wound on scalp, died after 10 days by radiation
S45	V	F	21	I	crushed
S77	V	F	17	I	crushed ?
S92	V	M	16	I	crushed ?
S108	V	F	18	I	crushed ?
S25	VI	F	23	I	died at 5 o'clock (edema on face)
S27	VI	F	22	M	died after a week by radiation (diarrhea) (no wound)
S43	VI	F	20	M	slight wound on scalp, died after 10 days by radiation
S46	VI	F	21	M	died after 10 days by radiation
S47	VI	F	19	M	died after 10 days by radiation
S83	VI	F	17	I	blast ?
S86	VI	F	16	M	died on 18/VIII by radiation
S90	VI	F	19	M	died by radiation ?
S91	VI	F	16	M	died on 19/VIII by radiation
2nd floor					
S15	VII	F	22	I	died on 9/VIII, burn on back
S68	VII	F	20	I	blast? curshed?
S70	VII	F	18	I	crushed

Table 2. Detailed list of all cases (continued).
(Shiroyama School)

Case	Room	Sex	Age	Prognosis	Other remarks
S72	VII	F	22	I	blast?
S82	VII	F	17	M	extensive burn, died on 26/VIII
S12	VIII	F	24	M	slight wound on face, died on 1/IX by radiation
S19	VIII	F	22	M	died after 5 days by radiation (no wound)
S39	VIII	F	24	M	died after 3 days, severe burn
S60	VIII	F	20	I	blast
S75	VIII	F	23	M	died after a few days
S95	VIII	F	17	S	epilation (+), anemia (+)
S98	VIII	F	17	M	died on 9/IX by radiation
S106	VIII	F	18	M	died on 12/VIII by radiation
S112	VIII	M	19	M	died on 19/VIII by sepsis, glass wound all over the body
S117	VIII	M	19	M	(no injuries listed)
S18	IX	F	24	M	after a week died by radiation
S58	IX	F	17	M	died by radiation
S69	IX	F	20	M	died by radiation
S71	IX	F	19	I	crushed
S76	IX	F	17	S	epilation (+)
S80	IX	F	17	M	severe burn, died in Oct. (remarkable weakness)
S81	IX	F	17	M	severe burn, died in Oct. (remarkable weakness)
S103	IX	F	16	S	epilation (+) stomatitis (+)
S104	IX	F	17	S	radiation effect (+) ?
S105	IX	F	18	M	died on 4/IX by radiation
S36	X	F	20	M	died after a week by radiation (no wound)

Table 2. Detailed list of all cases (continued).
(Shiroyama School)

Case	Room	Sex	Age	Prognosis	Other remarks
S62	X	F	21	M	died on 26/VIII by radiation wound on face
S107	X	F	13	I	died on 9/VIII
S111	X	F	16	M	died after 2 weeks by radiation

LOOKING WEST AT NORTH END OF BUILDING

VIEW OF SOUTH END AND WEST SIDE OF BUILDING

Figure 4. Chinzei school: looking west.

FIRST FLOOR

SECOND FLOOR

Figure 5. Chinzei school: first and second floors.

Table 3. Chinzei School position data.

Case	x(cm)	y(cm)	z(cm)
Basement			
1	-90±90	125±90	60
2	-225±90	325±90	60
3	135±30	-700±30	60
4	210±30	-455±30	60
5	85±30	-755±30	60
First Floor			
11	2960±60	-730±60	60
12	2155±60	-275±60	60
13	1140±60	540±30	60
16	1495±60	-470±60	60
17	3270±60	-720±60	60
92	-410±30	-445±30	90
101	-2090±30	385±60	60
102	-2090±30	480±60	60
103	-2090±30	565±30	60
104	-2090±30	665±60	60
112	-740±90	-70±60	90
115	-420±60	-215±90	90
Second Floor			
26	1580±60	-480±60	60
40	2975±60	540±60	60
43	2425±60	360±60	60
88	-3080±30	525±30	60
89	-3200±30	730±30	60
90	-2980±30	730±30	60
93	-3200±30	525±30	60
94	-3320±30	0±30	60
95	-2960±30	525±30	60
96	-3295±60	-295±60	90
97	-3070±30	730±30	60

Table 4. Shiroyama School position data.

Case	x(cm)	y(cm)	z(cm)
Second Floor			
12	190±60	-135±60	60
18	-290±30	75±30	60
19	+225±60	-345±30	60
36	-1310±90	25±60	60
58	-240±60	-360±30	60
62	-1030±60	25±60	60
69	-470±60	-360±30	60
75	130±30	50±30	60
76	-415±60	-225±60	60
95	435±60	75±30	60
98	645±60	-105±30	60
103	-470±60	60±30	60
104	-195±60	-230±30	60
105	-690±60	60±30	60
111	-1045±60	-135±60	60
117	390±60	-375±30	60
Third Floor			
10	-810±30	-380±30	60
17	-365±60	-135±30	60
21	-1310±60	-350±30	60
23	-1700±60	-375±30	60
27	-2600±60	-270±60	60
30	-390±60	-380±30	60
31	-265±60	-380±30	60
32	-1250±60	65±30	60
38	-120±30	-370±30	60
41	2520±60	75±30	60
42	1560±60	20±30	60
43	-2415±60	-30±60	60
44	-1440±60	-365±30	60
46	-2400±60	205±60	60
47	-2600±60	205±60	60
48	-1545±60	20±30	60
51	2340±60	75±30	60
52	2125±60	55±60	60
53	-250±60	-160±30	60
54	2120±60	270±30	60
56	1315±60	20±30	60
65	1325±30	-390±30	60
86	-2615±60	-25±30	60
88	-110±60	-170±30	60
90	-2210±60	-25±30	60
91	-2235±60	210±60	60
94	115±60	-135±30	60
101	2700±30	55±60	60
110	275±60	-135±30	60
113	2700±30	55±30	60
114	1180±60	20±30	60

- Chinzei school partitions--A request was made to provide any information on location of temporary partitions within the building. An estimate of the partition locations was transmitted to ORNL. The U.S. Strategic Bombing Survey (USBSS) documents state that the partitions were made of wood lath and plaster. However, photographs of the building interior strongly suggest that they were metal screen covered with stucco-like materials. This conflict was later resolved through additional information obtained from similar structures in Japan.

- Reinforced concrete construction--Because of the manner in which the roof collapsed at Chinzei school, there was conjecture that the pillars supporting the upper floors were concrete with bamboo reinforcement, rather than steel. However, there is no evidence that such was the case; the collapse of the upper level walls can be correlated to the construction described in the USBSS survey. The north end of the building had a steel truss roof with no pillar support above the third floor level. The roof over the south half of the building was wood truss construction supported by wooden pillars resting on the fourth floor of reinforced concrete.

- Ages of persons in Chinzei school--Several models exist in converting the free-in-air KERMA to midline and bone marrow dose. The choice of model depends on the weight and age of the person. A review of the case histories shows an age range of 15 to 65 years, with the median being 20. Based on these data, the 55 kg adult model is appropriate, and was used for this study.

- Chinzei school basement--Five persons were located in the basement of Chinzei school. Data were available for all persons in the basement. None received burns. Only two received any mechanical injuries, which were very minor. The basement group represents a significant portion of the survivors, and was included in the TORT calculations.

Once the preliminary positions were established, radiation levels were calculated at Oak Ridge. Based on that information, preliminary LD_{50} estimates were calculated using a log probit curve fit. When results were examined, the following considerations were reviewed.

A. Computed dose received by each individual--The high radiation gradients observed inside the buildings demand a location accuracy for each person that cannot be achieved from information in the database. Even if the accuracy were attainable, a large change in radiation occurred across the body dimensions. Some method of obtaining an equivalent uniform dose is required.

   It was decided to obtain a best estimate of case history location and additionally provide a tolerance in position based on the data available. The radiation level changes within this location tolerance were examined. A final approach to obtain an equivalent uniform dose was developed once the data obtained from the above steps was available.

B. Effects of the pressure wave on subject location--The pressure wave arrived about one second after weapon detonation. It is estimated to have created an overpressure of 25-28 psi. Although the mach stem had not yet fully formed at this range, the shock wave was sufficient

to collapse the roof of Chinzei school and to disintegrate the temporary partitions in the buildings. There is little doubt that it also displaced persons inside the building, especially if they were standing. A significant portion of the radiation came from the delayed gamma originating in the fireball, delivered after the shock wave had reconfigured the building and moved persons from their earlier positions.

The Chinzei school photographs were reviewed to ascertain if an estimate of subject displacement could be made. The review showed that it would be virtually impossible to define the displacement, because of the complex manner in which the shock wave interacted with the building openings and walls. In some cases a pressure backfill was evident. It was decided that the displacement would be limited to changing the standing persons to a prone position after the shock wave had passed.

C. Effect of building partitions on calculated radiation--Dose calculations assumed the temporary partitions remained in place while all the radiation was delivered. A better approximation was developed, in which the portion of the delayed radiation that occurred after the shock wave was calculated with the partitions removed.

D. Effects of delayed source directional distribution--ORNL has observed that the computer code for delayed gamma, obtained from SAIC, caused many negative values inside the buildings. These negatives were set to zero, and obscured any positive contribution from those directions. The reduction in total dose caused by this anomaly was not known at the time of calculation.

E. Effects of building model simplifications--The first model used for Chinzei school considered the building exterior to be rectangular. In reality the main entrance was set forward some distance. There were also offsets of this type at each end of the building. Those individuals that were located near the exterior offset walls were moved to a location in the model such that their distance from the exterior wall was preserved. The effects on radiation dose for those individuals was unknown, but the difference was expected to be small.

F. Appropriateness of the log probit curve fit--It was suggested that a different distribution may be more appropriate than the widely used log probit curve fitting. In particular, it was suggested that the Weibull distribution be examined.

A program was developed for the Weibull distribution by Dikewood. It follows the iterative process developed by Finney for the probit curve. The LD_{50} estimated for the combined schools by fitting a Weibull was 380 rads, as opposed to 350 obtained from the log probit iteration, using preliminary radiation data. In both cases the Chi-squared test showed good agreement with the assumed curve shape. For this case it indicates that the log probit and Weibull curve shapes obained are very similar.

No attempt was made to force a slope for the Weibull nor was a zero value selected. Because of the extra degree of freedom involved in the Weibull curve fit iteration, a larger sample size is required than for the log probit case. The Weibull solution obtained for the 32 samples for Chinzei school resulted in an "A" value less than one,

indicating an unusable result. For either method used, the shape is highly sensitive to the extremes; that is, deaths at low dose and survivors at high dose.

After considering the above factors, a refined study was undertaken in which:

(a) doses were calculated for the midpoint of the cells in the ORNL model rather than at the corners, since the cases were located in the cells. Figures 6 through 14 show log dose contours for the various floors in each building, when the above factors were included

(b) case history coordinates were revised to an accuracy of approximately one foot (with ± 3 feet uncertainty in the worst case), and

(c) the building models were more accurately defined, and are described below.

THE MODELS OF CHINZEI--In the beginning, the Chinzei building model #1 had shell, windows, beams, pillars, and floors from Reference 2. That reference did not give roof details, but Reference 3 indicated a tile roof over the south end of the building and concrete over the auditorium in the north end. In the model, 2" of concrete was used over the auditorium, and the tile was taken as equivalent to 2" of earth. The model had no basement or internal walls.

A basement and internal walls were added to Chinzei model #2 The internal walls followed Reference 4 in the basement and on the first floor, except that the open machine shop in the northeast corner was represented. This same approach resulted in so many conflicts between the blueprint rooms and reported personnel locations on the second floor that some adjustments based on References 5 and 6 were made. The third floor was based on Reference 5 and 6 for similar reasons, and the fourth was based almost entirely on Reference 5. References 5 and 6 gave no indication of wall thickness; however, Reference 4 was followed, insofar as possible, on this point. This reference indicated all walls in the basement and many of the upper-floor walls as 5" concrete walls, with the rest of thin-wall construction, arbitrarily taken as equivalent to 2" of concrete.

Several changes to the building were made between Chinzei model 2 and Chinzei model 3, based largely on the study of the photos and the corresponding layout drawings. The offset of the front wall entrance was added. A 5" thick wall at the front of the basement was removed. The photos indicate that it probably was never built. Windows were added at the rear of the basement. The height of all windows was reduced 11 percent, with a corresponding reduction in dose to areas away from the windows; they were also repositioned to agree with photos. All internal walls were made equivalent to 1-1/8" of concrete, based on available shielding summaries, except the walls adjacent to the stairwells and the basement walls. The stairwell and basement walls remained at 5" of concrete. All thin walls were assumed to have been removed by the blast, while the 5" walls were assumed to remain intact.

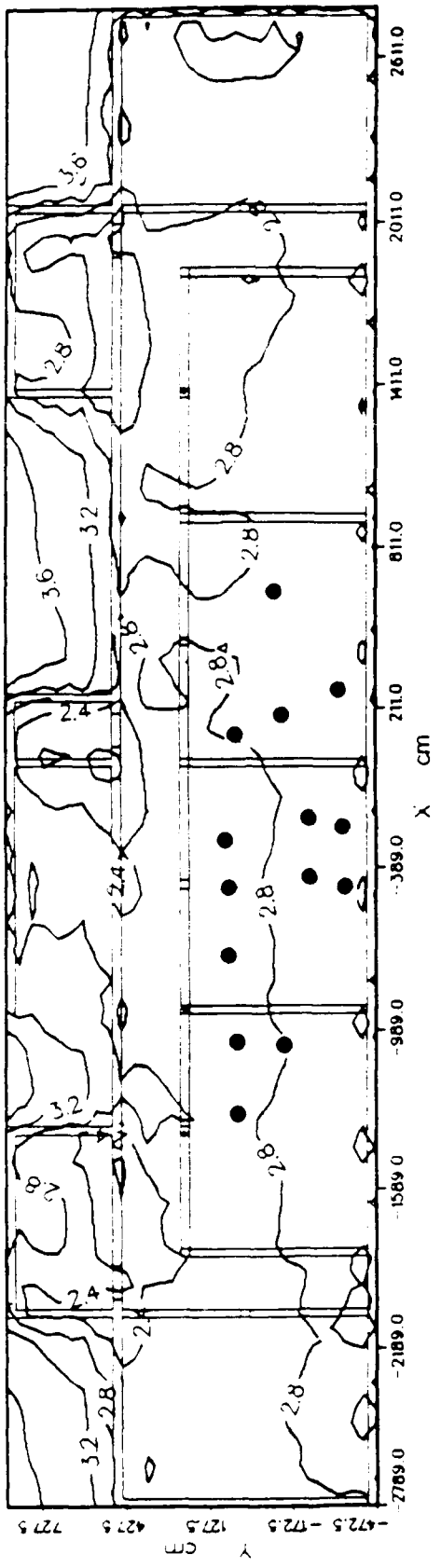

Figure 6. Shiroyama school log dose contours: 48 cm above second floor.

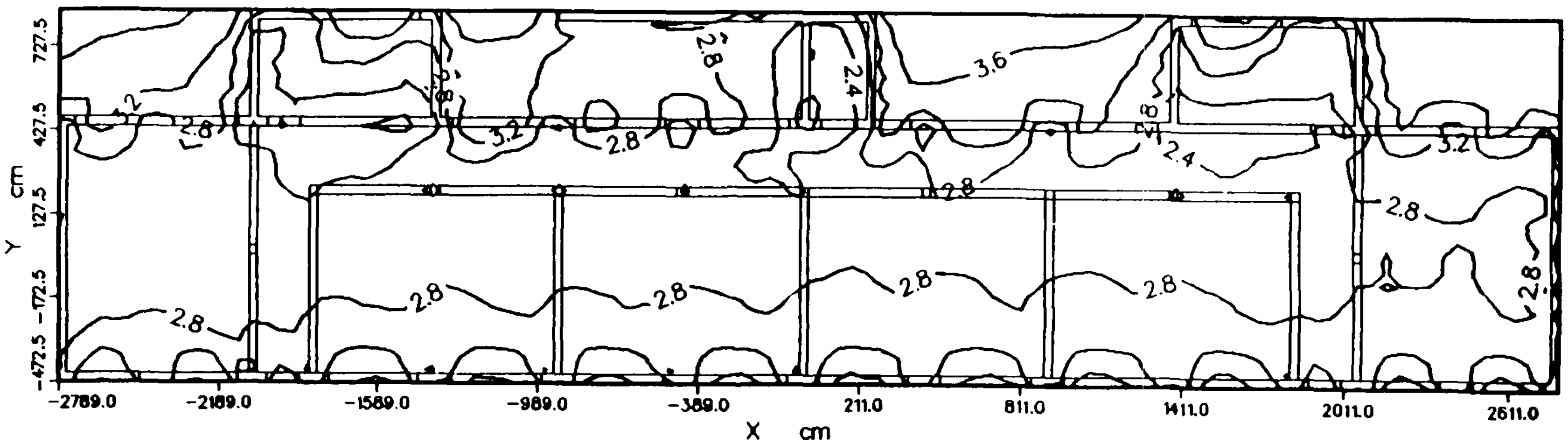

Figure 7. Shiroyama school log dose contours: 150 cm above second floor.

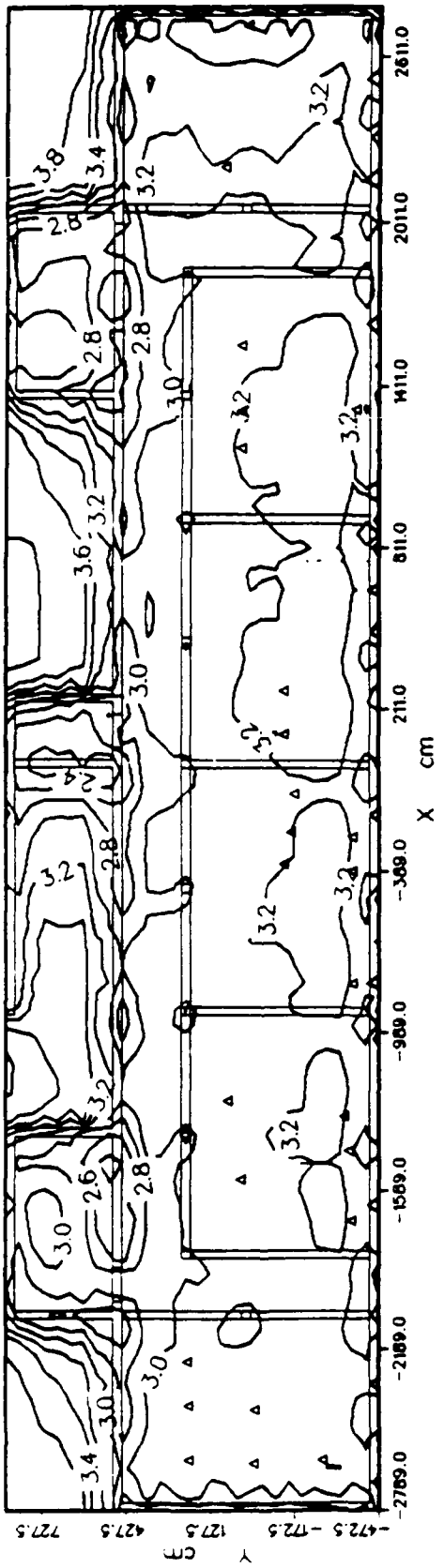

Figure 8. Shiroyama school log dose contours: 48 cm above third floor.

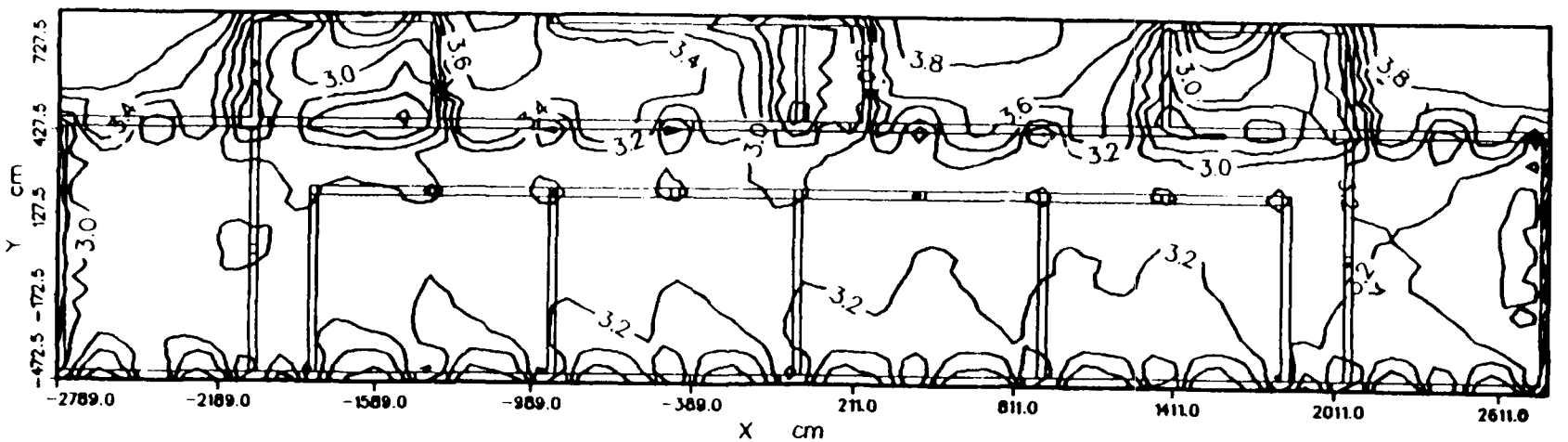

Figure 9. Shiroyama school log dose contours: 150 cm above third floor.

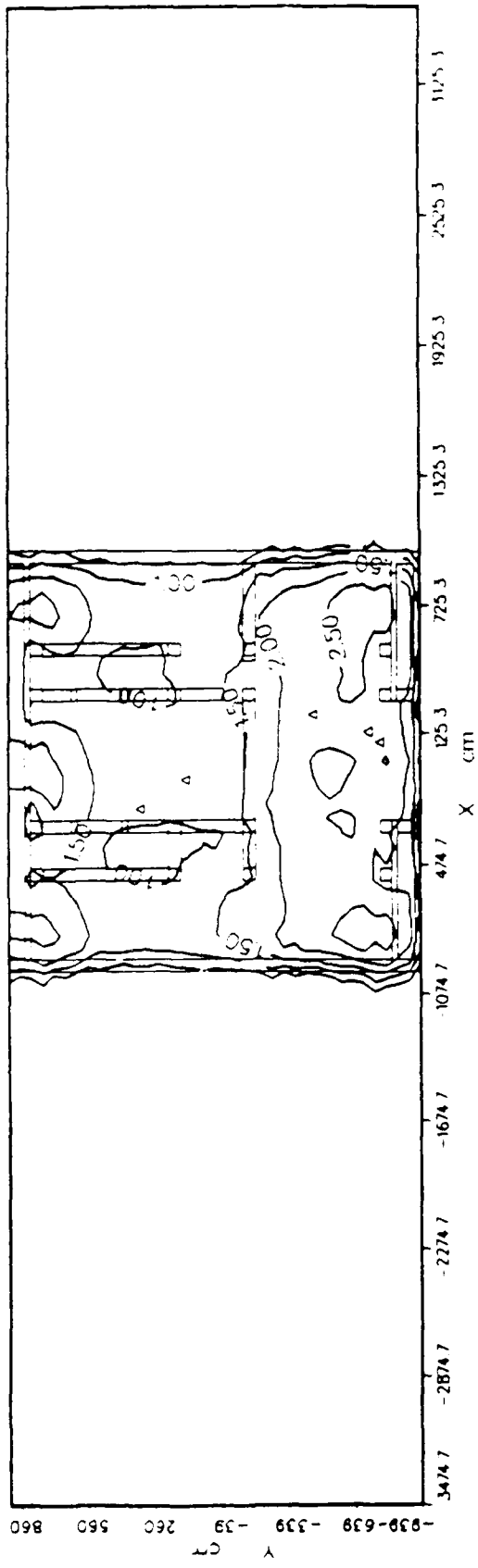

Figure 10. Chinzei school log dose contours: 50 cm above basement floor.

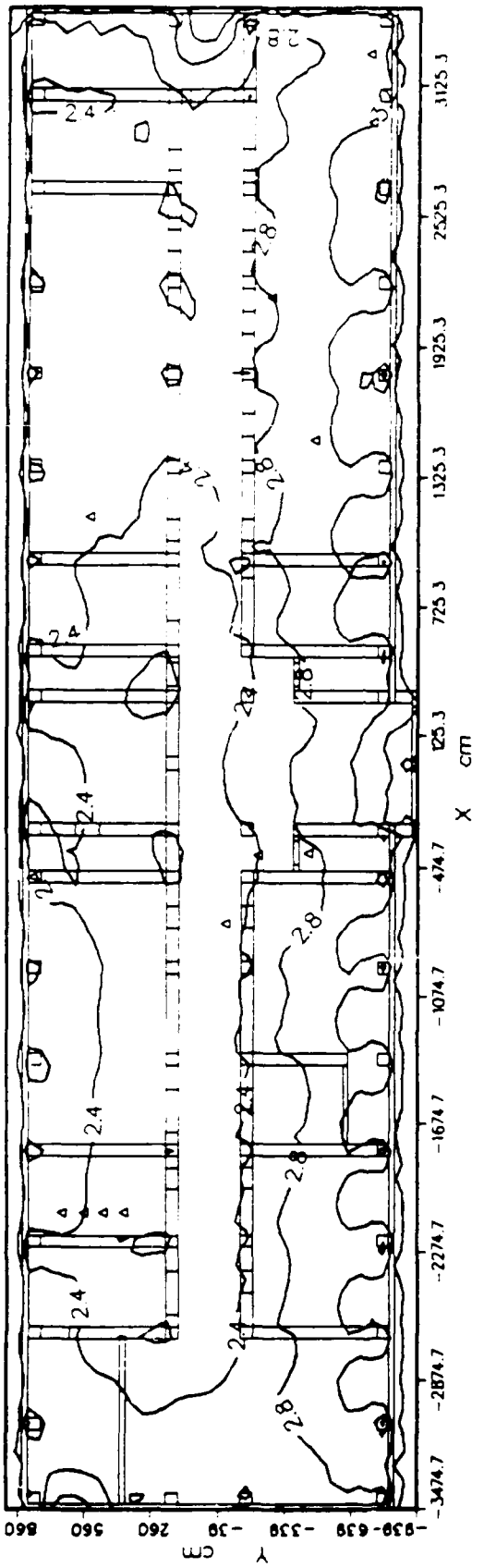

Figure 11. Chinzei school log dose contours: 50 cm above first floor.

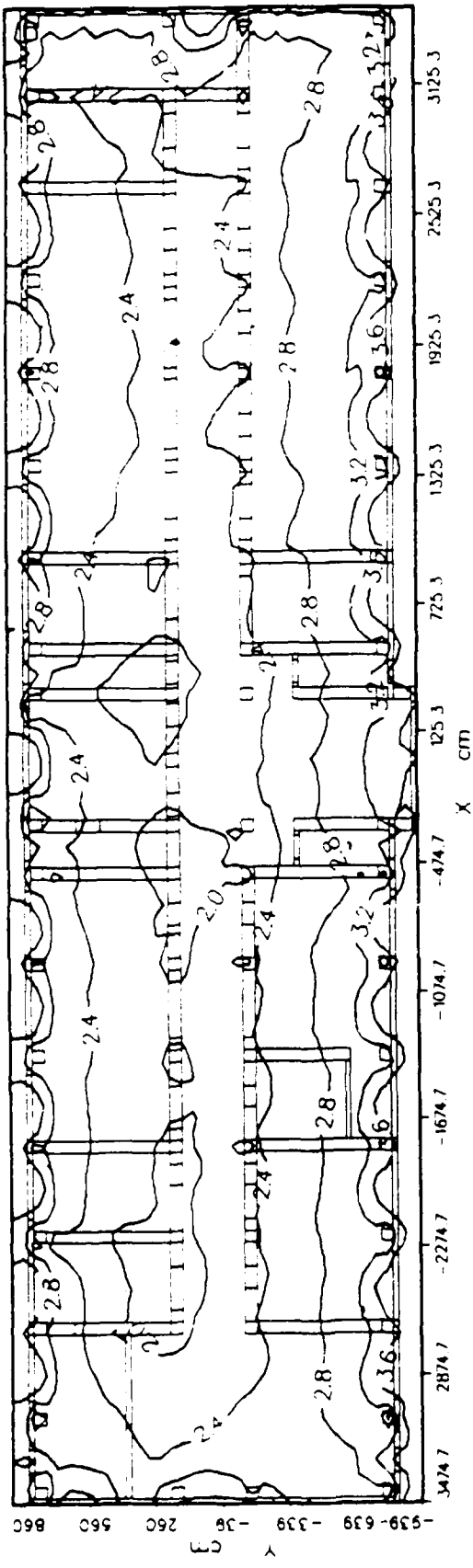

Figure 12. Chinzei school log dose contours: 147 cm above first floor.

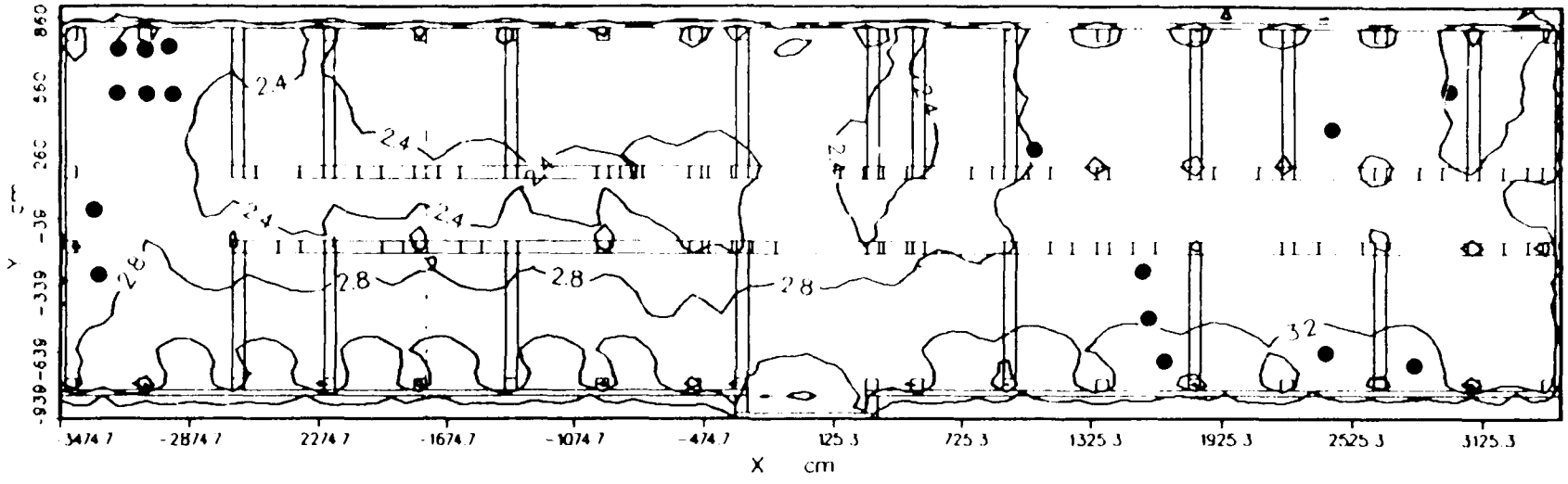

Figure 13. Chinzei school log dose contours: 50 cm above second floor.

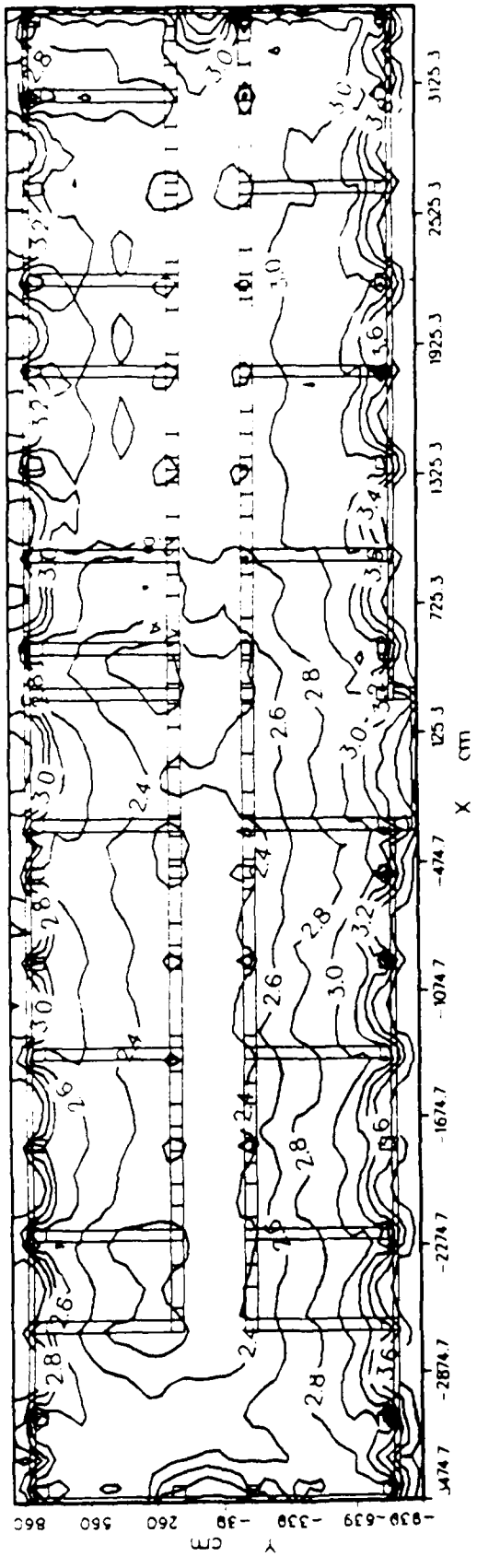

Figure 14. Chinzei school log dose contours: 147 cm above second floor.

At one time, it was intended to raise the building into the air to the height of the hill on which it sat. This was not feasible because of the limited range of the delayed gamma data. It is also questionable whether it would have improved the accuracy without a complete recalculation of ground effect and other related details. The impact of changing the elevation of the buildings was investigated at a later time.

THE MODELS OF SHIROYAMA--The outside shell of the Shiroyama model #1 was constructed largely from Reference 2. Walls were taken as 12" of concrete, while floors were 5 1/2" of concrete. The window sizes and positions were obtained by scaling from sketches in the reference. No details of the east and west walls of the building were available, so a few windows were arbitrarily placed there. Reference 3 gave conflicting values, 8" and 4 1/2" for the wall and floor thicknesses, but there was no reason to prefer those values over the generally-consistent USSBS values. The stairwells on the north side of the building were described, and enough of the passageway to the building adjoining to the north was described to allow proper shielding calculations.

The internal walls were based on Reference 5. The wall thicknesses were arbitrarily taken as 2" of concrete due to inconsistent data in the references.

In the Shiroyama building model #2, the windows on the east and west were removed. One photo was found that indicated that no windows existed on the west wall of the second floor, and it appears likely that both ends were constructed in this way. The passageway to building one on the north side was remodeled to give a better representation. The window height was adjusted from 6' to 7' based on photos, and the window bottoms were raised by 1'2".

The internal wall thickness was also readjusted. The only information available as to thin-wall construction in either Chinzei or Shiroyama buildings is a notation in one of the analyses that a diagonal line through one such wall was equivalent to 10 cm of water. Considering the angle and densities, this is equivalent to approximately 1 1/8" of concrete, and would compare favorably with heavy plaster or stucco construction in pre-war US buildings. Accordingly, this thickness was used for all internal walls in Chinzei 3 and all internal walls except the 5" walls in Shiroyama 2. An extensive attempt to obtain additional evidence as to this construction detail was fruitless.

d. a final adjustment of building location was made to account for the elevation of the schools (60 feet for Chinzei and 80 feet for Shiroyama).

LD_{50} estimates were made based on a probit calculation. Results are given in Tables 5 through 7 showing the free-in-air (FIA) and bone marrow estimates. Log probit calculations are presented in Figures 15 through 20. Values including burns and blast have no particular significance because of

Table 5. Cases used in LD_{50} determination (Chinzei).

Case	Age	Sex	Dose (cGy) Fia	Dose (cGy) Marrow	Died/ Survived	Days After	Injuries	Hospital Records	Remarks
Basement									
1	19	M	22	17	S	-	Minor Cuts	Yes	No treatment
2	17	M	24	18	S	-	Minor Cuts	No	
3	23	F	352	263	S	-	None	Yes	No treatment
4	19	M	184	136	S	-	Face Wound	No	
5	18	F	326	242	D	28	None Reported	No	
First Floor									
11	22	F	1838	1325	D	?	None Reported	No	
12	23	F	694	486	D	?	None Reported	No	
13	26	M	409	284	S	-	Minor Cuts	Yes	No treatment
16	16	F	1079	765	D	45	None Reported	No	Death Given as 1.5 Mo.
17	18	F	1928	1411	D	?	None Reported	No	
92	15	M	454	319	S	-	Leg Fracture	No	
101	19	M	189	130	S	-	Leg Fracture	No	
102	19	M	216	148	D	31	Head Wound	No	Death given as 1 Mo.
103	19	M	269	182	S	-	Head, Shoulder wounds	No	
104	19	M	388	261	D	7	None reported	No	
112	15	M	246	168	S	-	Head wound	No	
115	15	M	263	184	D	?	None reported	No	

Table 5. Cases used in LD_{50} determination (Chinzei) (continued).

Case	Age	Sex	Dose (cGy) Fia	Dose (cGy) Marrow	Died/ Survived	Days After	Injuries	Hospital Records	Remarks
Second Floor									
26	27	M	1630	1173	D	14	None reported	No	
40	18	M	783	566	D	23	Slight burn	No	
43	19	M	1253	916	D	9	None given	No	
88	65	M	406	286	S	-	Cut on Head	Yes	No treatment
89	35	M	327	236	D	?	Minor Contusion	Yes	No treatment
90	44	M	617	435	D	31	None	Yes	No treatment
93	41	M	389	278	S	-	Scratches	Yes	No treatment
94	48	M	631	431	S	-	Minor Cuts	Yes	See Note 1
95	63	M	381	266	S	-	Slight cuts	Yes	No treatment
96	20	M	536	381	D	26	Cuts, hips, back	Yes	No treatment
97	47	M	539	384	S	-	Minor head wounds	Yes	No treatment

1. General surgical treatment, blood transfusion, liver preparation

Table 6. Cases used in LD_{50} determination (Shiroyama).

Case	Age	Sex	Dose (cGy) Fia	Dose (cGy) Marrow	Died/ Survived	Days After	Injuries	Hospital Records	Remarks
Second Floor									
12	24	F	873	618	D	23	Slight face wound	No	
18	24	F	539	382	D	7	None reported	No	
19	22	F	1729	1237	D	6	No wounds	No	
36	20	F	541	383	D	7	No wounds	No	
58	17	F	1756	1260	D	?	None reported	No	
62	21	F	543	386	D	17	Face wound	No	
69	20	F	1318	957	D	?	None reported	No	
75	23	F	629	450	D	?	None reported	No	
76	17	F	1057	751	S	-	Minor cuts	Yes	See Note 1
95	17	F	684	483	S	-	Lacerations, head, back	Yes	See Note 2
98	17	F	795	561	D	31	None reported	No	
103	16	F	568	402	S	-	Minor cut	Yes	Gen. Surgery Treatment
104	17	F	869	609	S	-	None reported	No	
105	18	F	582	414	D	26	None reported	No	
111	16	F	669	473	D	14	None reported	No	
117	19	F	1056	756	D	?	None reported	No	

1. VC injection, wound treatment next day

2. Tetanus serum, Aktisol injection, three blood transfusions (600cc) between 9/4 and 10/10, Glucose, Ringers solution, Liver preparation, Vitamin C.

Table 6. Cases used in LD_{50} determination (Shiroyama) (continued).

Case	Age	Sex	Dose (cGy) Fia	Dose (cGy) Marrow	Died/ Survived	Days After	Injuries	Hospital Records	Remarks
Third Floor									
10	23	M	2592	1890	D	11	None Reported	No	
17	21	F	1822	1321	D	7	Scalp wound	No	Death after a week
21	23	F	2502	1821	D	7	None	No	Death after a week
23	23	F	2457	1788	D	7	None reported	No	Death after a week
27	22	F	1666	1204	D	7	None	No	Death after a week
30	22	F	2492	1820	D	7	Scalp, shoulder wounds	No	Death after a week
31	22	F	2480	1793	D	7	Leg wound	No	Death after a week
32	20	F	1552	1131	D	7	None given	No	Death after a week
38	21	F	1764	1266	D	?	None Reported	No	
41	23	F	1329	951	D	?	None given	No	Death after a few days
42	21	F	1704	1239	D	10	Leg fracture	No	
43	20	F	1526	1108	D	10	Slight scalp wound	No	
44	20	F	1756	1271	D	10	Scalp wound	No	
46	21	F	1400	1012	D	10	None given	No	
47	19	F	1480	1073	D	10	None given	No	
48	21	F	1609	1174	D	7	Scalp contusion, Fractured hand	No	Death after a week
51	23	F	1781	1291	D	5	None reported	No	
52	20	F	1946	1422	D	10	None	No	
53	20	F	1704	1227	D	7	Leg fracture	No	Death after a week
54	23	F	2240	1625	D	?	None reported	No	Death after a few days
56	18	F	1892	1382	D	7	Scalp laceration	No	Death after a week
65	20	F	1802	1308	D	14	None reported	No	
86	16	F	1581	1155	D	9	None reported	No	
88	16	F	1659	1197	D	10	None	No	
90	19	F	1291	929	D	?	None reported	No	
91	16	F	1301	935	D	10	None reported	No	
94	18	M	1908	1385	D	3	None	No	Death after 3 days
101	18	F	1688	1216	D	16	None reported	No	
110	15	F	1864	1347	D	14	None reported	No	
113	19	M	878	636	D	5	None	No	
114	18	M	1877	1366	D	10	None reported	No	

Table 7. Combined school data (LD_{50}) (cGy).

	FIA		Bone Marrow	
COHORT-75	412	(4.4)	295	(3.2)
COHORT + BURNS-92	397	(4.6)	279	(5.4)
COHORT + BLAST-80	412	(4.9)	295	(3.6)

Numbers in parenthesis represent the Chi-squared results for the data.

Two to 60 day cases

BURNS: 6C, 18C, 30C, 27C, 32C, 37C, 46C, 49C, 54C
39S, 78S, 80S, 81S, 82S, 87S, 109S, 118S

BLAST: 40S, 49S, 73S, 106S, 112S

AVERAGE DOSE (cGy)

	FIA	Bone Marrow
Survivors-Cohort (18)	426	300
Died-Cohort (57)	1377	994
Burns (2-60 days) (17)	1576	1136
Blast (2-60 days) (5)	1582	1140

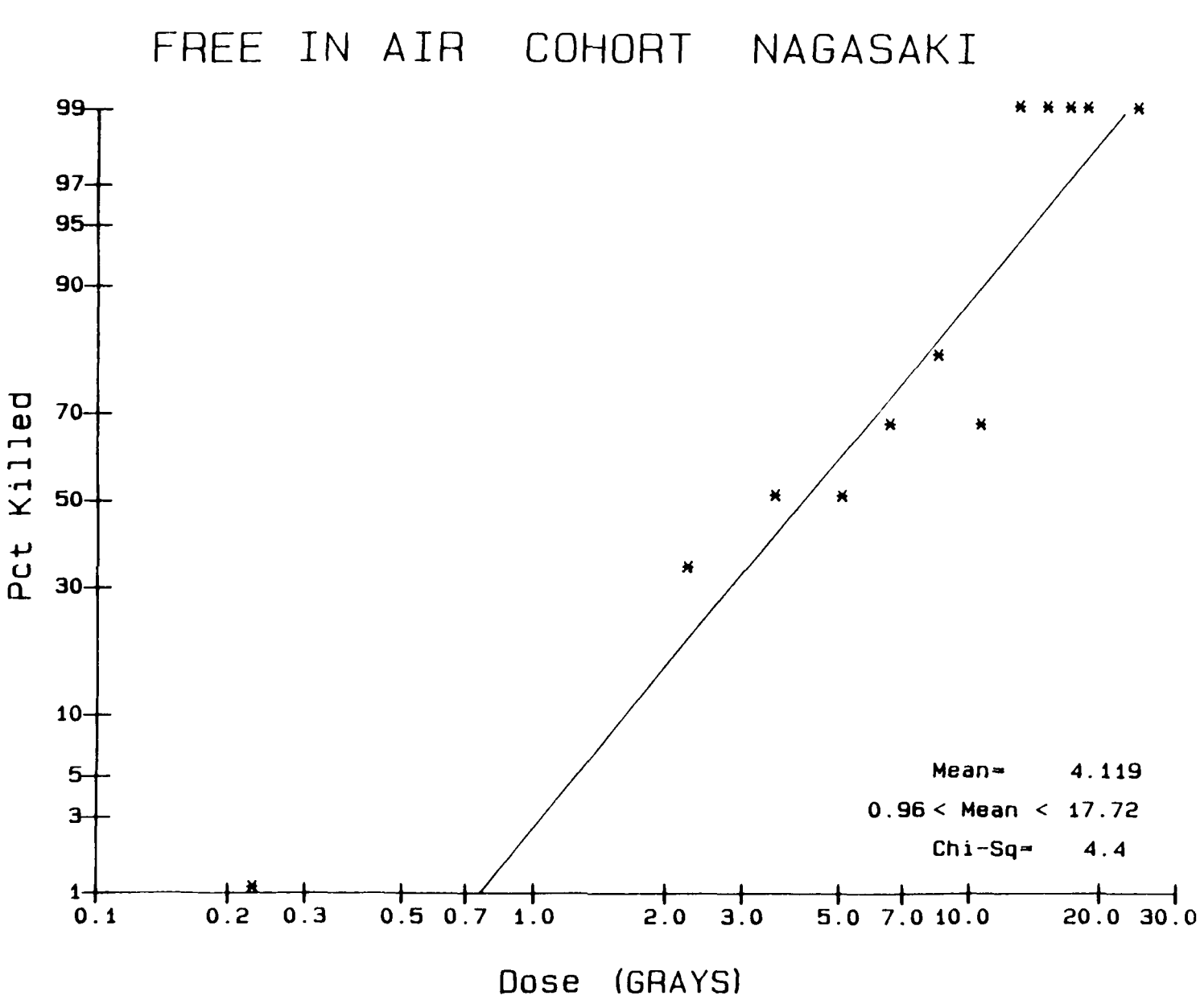

Figure 15. Probit fit--cohort group (FIA).

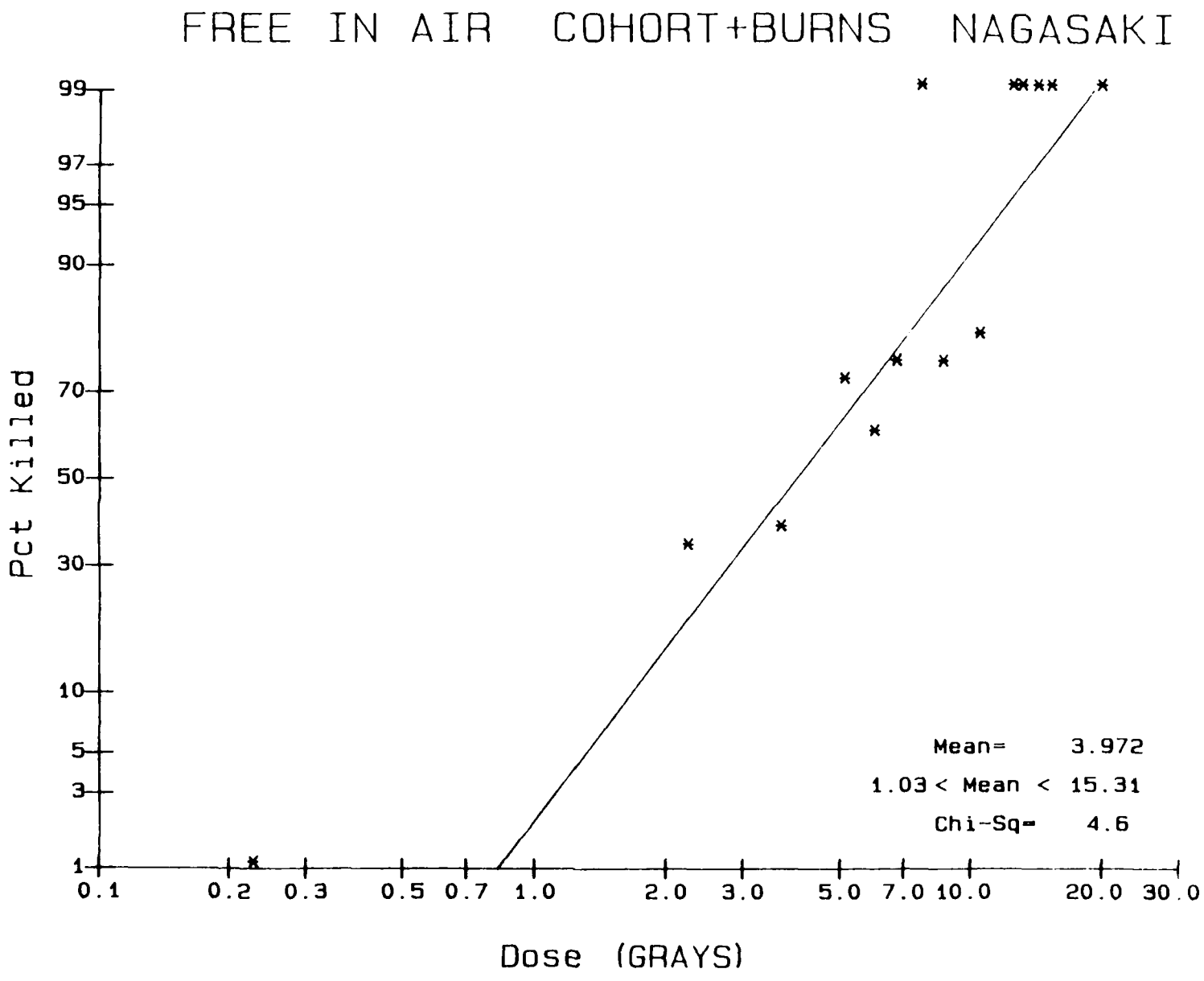

Figure 16. Probit fit--cohort group + burns (FIA).

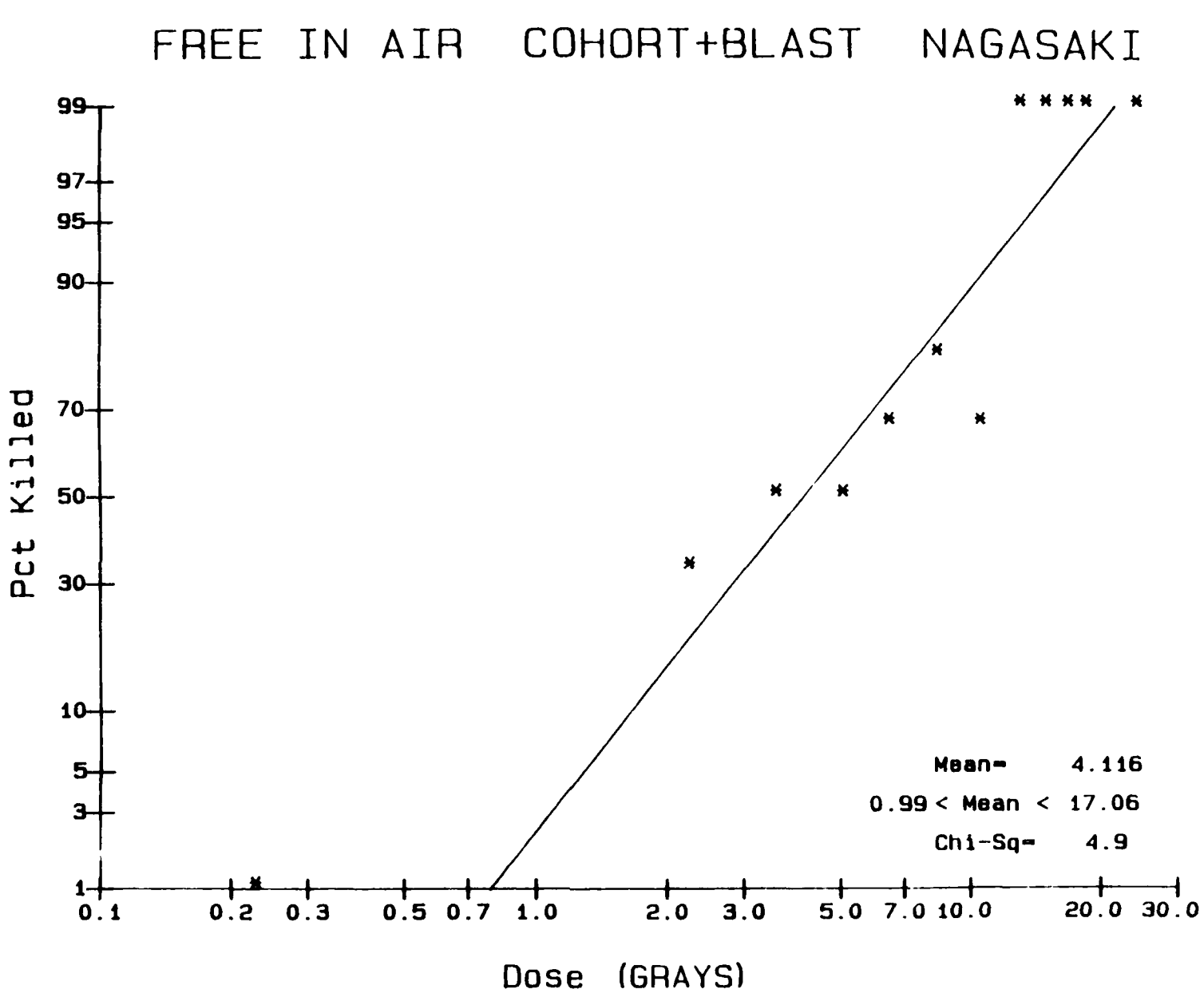

Figure 17. Probit fit--cohort group + blast (FIA).

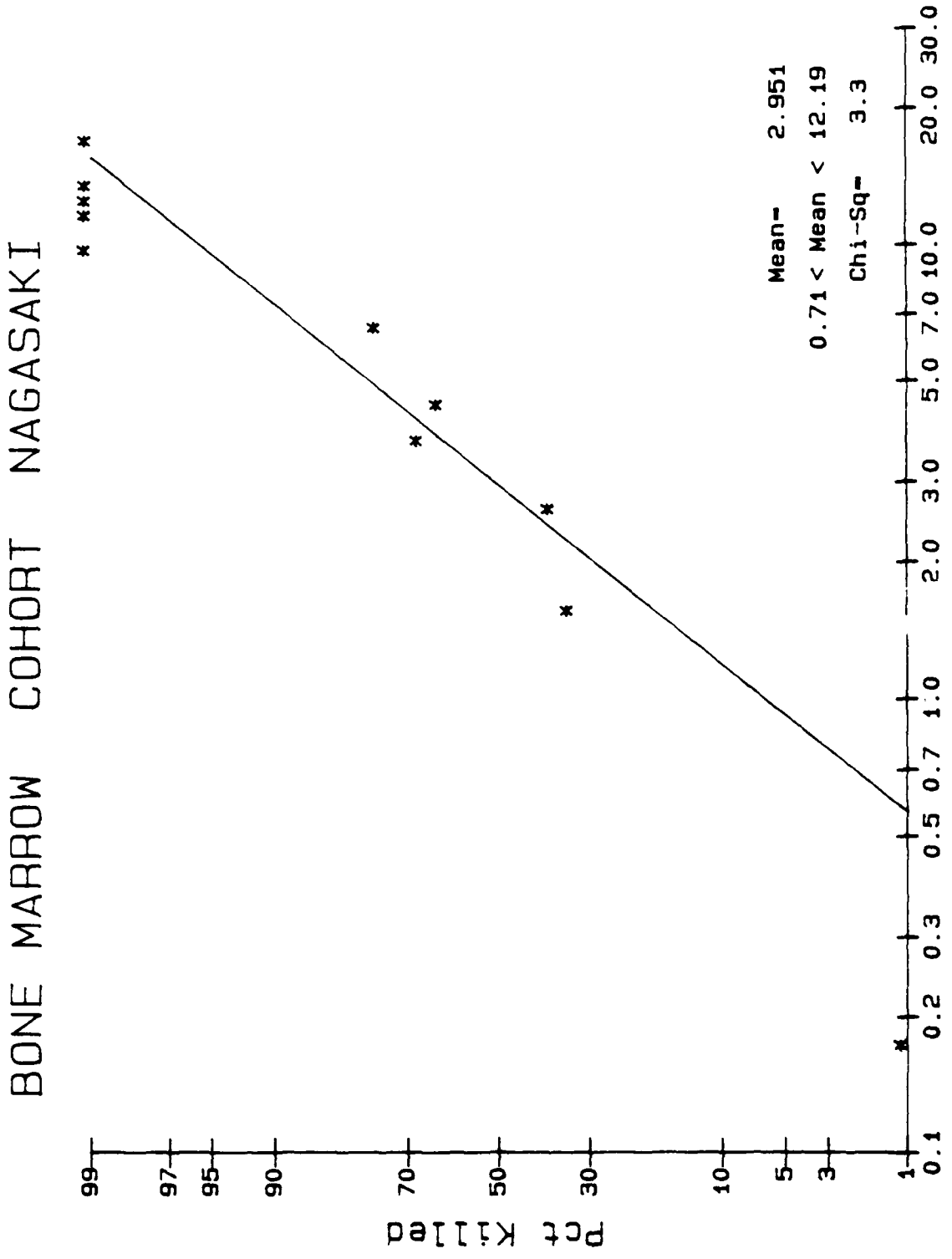

Figure 18. Probit fit--cohort group (bone marrow).

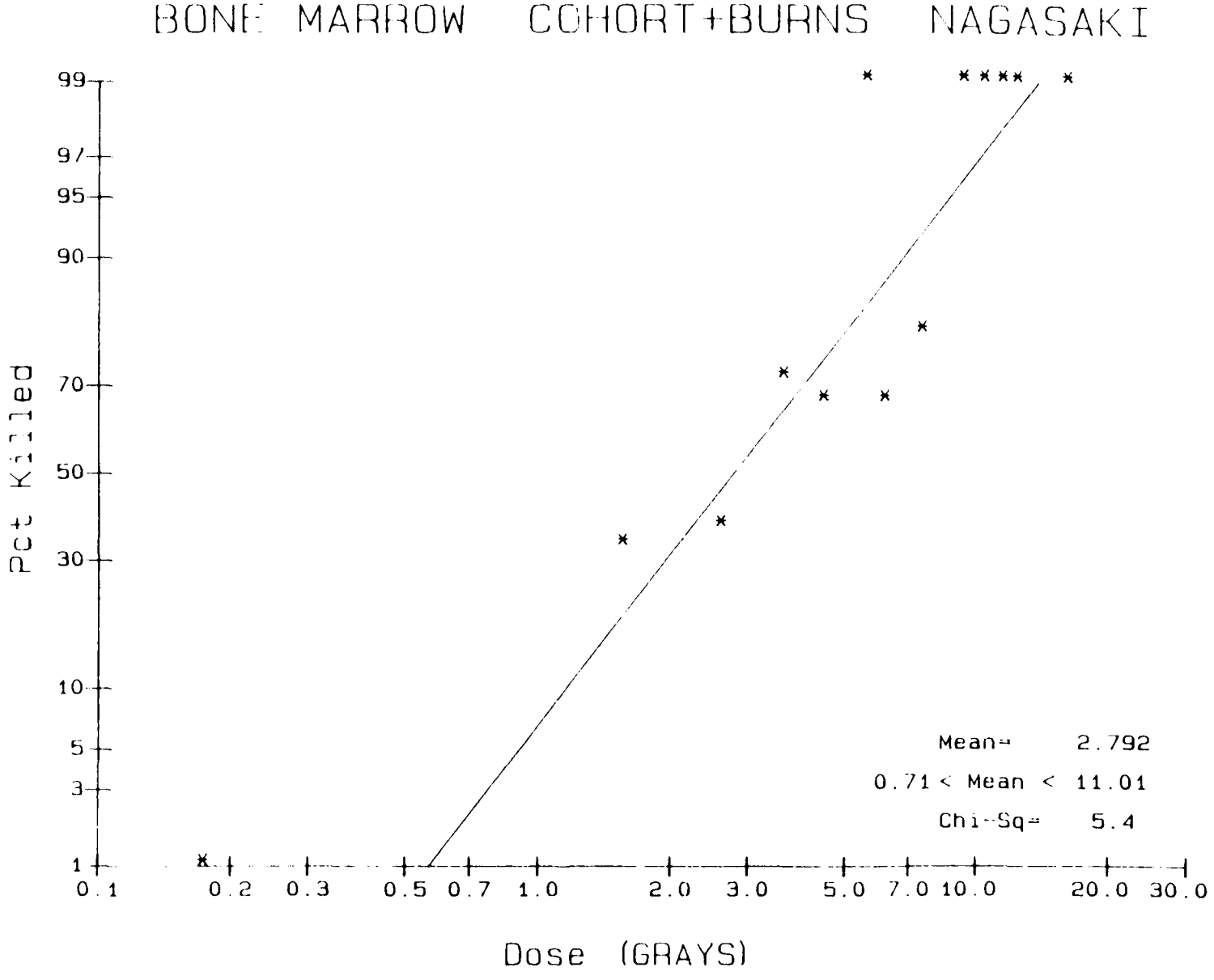

Figure 19. Probit fit--cohort + burns (bone marrow).

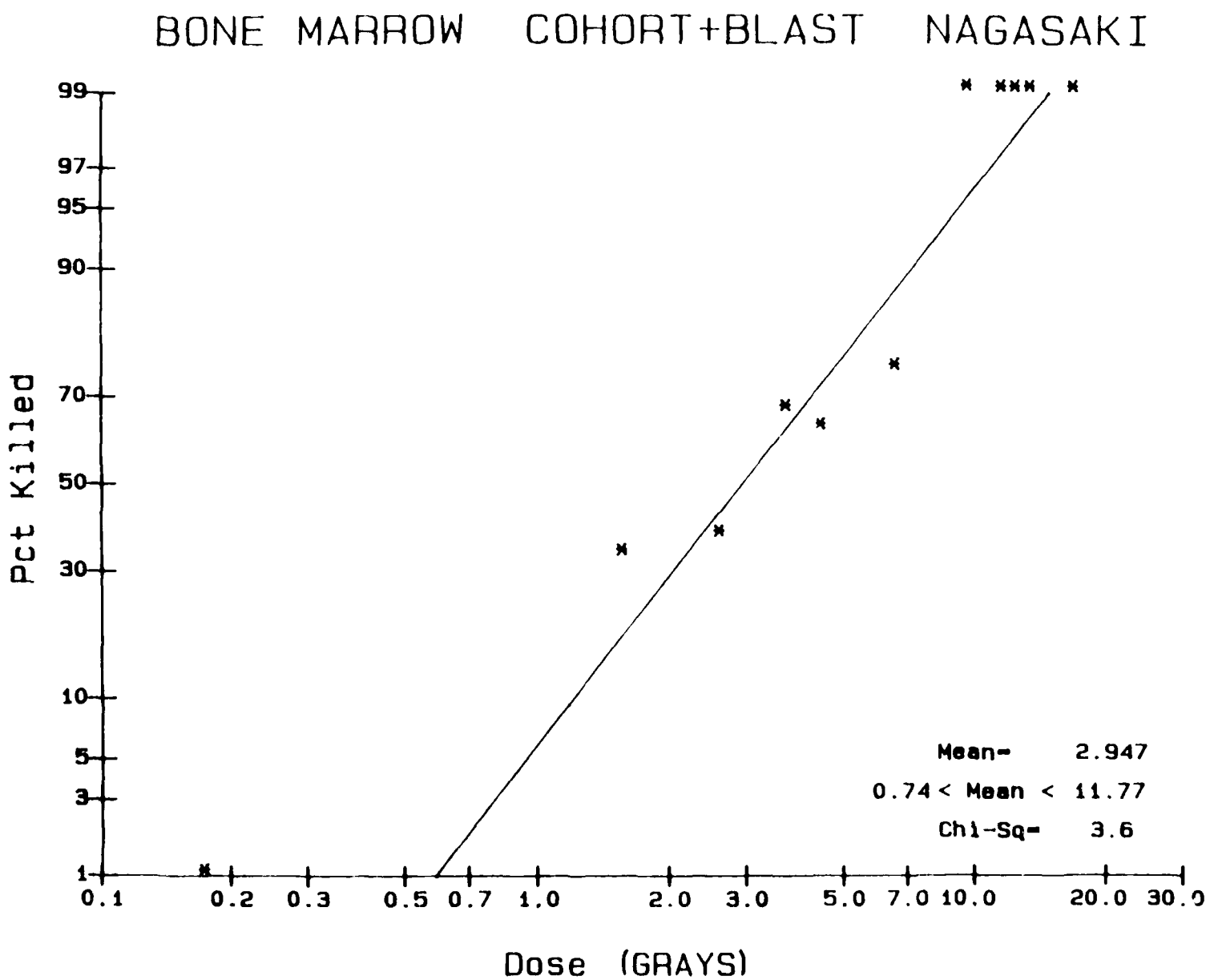

Figure 20. Probit fit--cohort + blast (bone marrow).

the small number of cases. For burns, a decrease in the LD_{50} is noted, which tends to confirm the popular concept that multiple injuries reduce tolerance to radiation injury. The blast cases show no trend; this is attributable to the small number available and the fact that the dose levels are too high to have an impact on the LD_{50} estimate.

SECTION 2

COMBINED INJURY AND MORTALITY ANALYSIS

2.1 ORIGINAL WORK PLAN.

The work plan for this original effort was to:

I. Catalog and define programs and data tapes from previous work.

II. Examine and verify that combined data tapes are adequate to be used for the raw data base.

III. Develop computer programs to sort the number of single and multiple injury cases that exist for group and nongroup cases.

A. Burns	Minor
B. Mechanical	Moderate
C. Nuclear	Severe

These data were to provide a good indication of the number of cases in each category.

IV. Provide tabulations by single injury severity, combination severity, and injury versus mortality for each city and data base.

V. Examine available data and determine suitable response criteria.

VI. Develop restricted data bases for each injury criteria, including relevant items from the raw data base.

VII. Based on the criteria and data bases defined above, determine methods of presentation that will be most comprehensive. Analyze data and determine implications.

This plan was not completed since critical data needed for the study did not become available in time to obtain valid results. These critical data were:

a) revised Hiroshima and Nagasaki yield

b) revised information necessary to calculate radiation attenuation through the walls of wood frame buildings.

While waiting for the critical data to become available, preparation tasks were completed. Special edit lists were produced at the same time that group data counts were being obtained. These edits were designed to examine certain data elements in each case history and flag those that 1) were identified as match cases that had been combined; 2) contained code numbers that represented out-of-range conditions; 3) showed a large difference between range from hypocenter as coded and as calculated from given coordinates; and 4) had range given with no coordinates listed. The edit lists were manually reviewed, and approximately 100 records were selected for further examination by comparing

them with the written case history records on file at Dikewood. Although this examination did uncover a few coding errors, the general conclusion is that the Combine Tapes do represent the preferred data base source, and the match cases have been correctly incorporated. Corrections have been incorporated in the Combine Tapes for those few errors that were found.

The data base was examined to obtain a breakdown of injuries by shielding category and survival. After examination of the counts for each category, the Hiroshima group data were selected for further examination. Runs were made for outside unshielded (OU) and wood frame (WF) shielding cases. Data were categorized by weapons output, using the 1965 data for thermal exposure for the OU cases and overpressure for WF buildings. Combination injury percentages were listed for each exposure interval. These data are presented in Appendix 1. Listings of injury by psi or cal/cm^2 exposure are cumulative, and are interpreted as "no worse than." For example, the first column on page 65 is read as "light mechanical with no burns and no more than moderate radiation injury."

2.2 JAPANESE CASUALTY DATA MEETING -- SEPTEMBER 26, 1983.

A working meeting was held to discuss the goals of the Combined Injury Analysis and to define the kinds of injury responses desired.

The following major areas were covered in the meeting:

a. Radiation symptoms as the effects criteria are of primary concern. Any synergistic effects relating to non-nuclear injuries obtained during the primary analysis are also of interest; however, they are of secondary importance.

b. Revised weapon yield data for Hiroshima and Nagasaki were discussed. Since this study will provide data as a function of weapons effects, the availability of the revised data was reviewed.

    1) Agreement on the yield of the Hiroshima weapon has yet to be obtained.

    2) Revision of EM-1 is being managed by Kaman Tempo. DW will investigate the new thermal information being handled by KSC.

    3) Overpressure HOB curves are also changing. However, the heights and ranges for pressures less than 10 psi are expected to show minimal change. Kaman is also involved in this revision.

4) Revised radiation information is not yet complete. Some asymmetry may appear at short ranges, but is expected to disappear at longer distances, where most of the casualty data are available.

5) The "nine parameter" revision is not yet complete.

6) Burst heights and hypocenters are expected to change very little, if at all. George Kerr will provide the latest information.

Because of the uncertainty in the availability of revised data for nuclear dose, the same radiation, nine parameter equations and yields as were used in the previous DW study (DC-FR-1306) will be used at this time.

c. An approach was developed for Phase One of the evaluation, and is detailed in Table 8. The major thrust of this effort is to examine the symptoms that are traditionally associated with nuclear radiation, to see if they may also be present when only blast and burn injuries occurred.

d. Although not discussed at the meeting, it should be noted that all of the data base (Group and Nongroup) can be used for this phase of the study, which is confined to the surviving injured. The restriction to use of group data only applies when studies involve injured versus uninjured information, or mortality percentages.

2.3 RESTRICTED DATA BASE.

Reduced data bases have been created and verified, and are included as Tables 9 and 10. Inspection of the data base has revealed some differences between coding items in the case histories. Resolution of these differences has been made, based on past experience and a knowledge of priorities that were established during the coding process. Areas that apply to this study are described below.

a. Date and cause of death. Any unknown death date (989898) is not included. In most cases, this date was coded to indicate death on or very soon after the date of burst. In addition, cases having a death date within 90 days of burst are not included if the coding shows death due to natural causes. As this phase is considering the surviving injured, it cannot be said that they would have survived 90 days if the natural complications had not existed. Less than 50 case histories fall in this category.

b. Coding of injuries by severity (114-116)* and identification of burn severity (90-91), as well as mechanical severity (84). In some cases an

*Numbers in parenthesis are data item numbers.

Table 8. Phase one analysis study approach.

Utilizing the Japanese casualty data base examine radiation symptoms for the surviving injured as follows.

I. OUTSIDE UNSHIELDED EXPOSURE (HIROSHIMA ONLY)

A. Burns

1. Examine cases with burns only, exposed to less than 25 rad calculated, Free In Air.

2. Determine percent of burns only cases exhibiting each of the 10 radiation symptoms, as the data allow.

3. Show as a function of calculated thermal exposure (cal/cm^2).

4. Examine for moderate and severe burn cases.

5. Repeat Steps 1-4 for combinations of burns plus mechanical injury. Show as percent of the cases with burns plus mechanical (moderate and severe).

6. Repeat Steps 2-4 for burns extended to higher levels of radiation exposure, if data permits.

II. WOOD FRAME AND OUTSIDE SHIELDED (BY WOOD FRAME) CASES (BOTH CITIES)

A. Radiation only. Completed in Ref 1.

B. Blast Only Injuries

1. Examine cases with less than 25 rad exposure at body surface, using the nine parameter model to determine attenuation.

2. Limit to burns less than moderate.

3. Determine percent of cases with above defined injuries that exhibit the radiation symptoms, as data allow.

4. Show incidence of symptoms vs. calculated overpressure (psi).

5. Examine for moderate and severe blast injuries.

C. Blast plus Burn Injuries

1. Repeat B, above, for blast plus moderate and severe burns, showing severity combinations separately, as the data allow. Some collapse of categories may be required.

Table 8. Phase one analysis study approach (continued).

D. Blast plus Radiation

1. Repeat B, without the 25 rad limit for all blast injury cases, as the data allow.

2. In addition to showing incidence of radiation symptoms as a function of psi, show incidence as a function of radiation exposure at the body surface (rad).

3. Run separately for moderate and severe blast.

E. Burns plus Radiation

1. Repeat D, above, using burns in place of blast, as the data permit.

2. Show incidence only as a function of radiation exposure.

F. Blast plus Burns plus Radiation

1. Show percent of symptoms vs. radition dose at the body surface, for cases in each exposure interval.

2. Run separately for moderate and severe combinations as a function of radiation exposure of the body surface, as data permit.

Table 9. Restricted data base--outside unshielded cases.

Number	Case History Item*	Description
1	1	DW Master File Number
2	2	City Code
3	3	East/West Coordinate Location
4	4	North/South Coordinate Location
5	5	Coded Ground Range from Hypocenter
6	6	Location at Time of Burst (ATB)
7	24	Physical Position of Subject
8	37	Data Source
9	38	Data Source File Number
10	48	Medical Condition Prior to Burst
11	49	Medical Condition Immediately After Burst (IAB)
12	71	Interview Date
13	72	Interview Reliability
14	74	Sex
15	75	Age (ATB)
16	79	Prime Cause of Mechanical Injuries
17	80	Cuts, Lacerations, Punctures
18	81	Contusions, Abrasions
19	82	Fractured Bones
20	83	Other Blast Effects
21	84	Severity of Mechanical Injuries
22	85	Head Covering Worn
23	86	Clothing Worn
24	87	Burns Relative to Clothing
25	88	Type of Burns
26	89	Area of Burns
27	90	Percent Area Burned
28	91	Severity of Burns
29	92	Days to Vomiting Onset
30	93	Duration of Vomiting
31	94	Days to Diarrhea Onset
32	95	Duration of Diarrhea
33	96	Days to Bloody Diarrhea Onset
34	97	Malaise or Anorexia Present

*Item number in case history record.

Table 9. Restricted data base--outside unshielded cases (continued).

Number	Case History Item*	Description
35	98	Days to Onset of Gingivitis or Pharyngitis
36	99	Duration of Gingivitis or Pharyngitis
37	100	Days to Onset of Necrotic Ging. or Phary.
38	101	Days to Onset of Purpura or Petechiae
39	102	Duration of Purpura or Petechiae
40	104	Percent of Scalp Epilation
41	105	Days to Onset of Scalp Epilation
42	107	Presence of Sweating and Skin Pigmentation
43	108	Reproductive System Abnormalities
44	109	Fever Onset
45	110	Eye Injuries
46	111	Date of Hospital Admittance
47	112	Date of Hospital Discharge
48	113	Place of Examination
49	114	Most Severe Injury
50	115	Second Most Severe Injury
51	116	Third Most Severe Injury
52	117	Major Complications
53	118	Other Complications
54	119	Type of Patient Treatment
55	120	Lowest Red Blood Cell Count
56	121	Lowest Hemoglobin
57	122	Lowest White Blood Cell Count
58	123	Date of First Treatment
59	124	Date Patient Last Seen
60	127	Additional Items of Interest (Oak Ridge)
61	128	Additional Items of Interest (AFIP)
62	-	Record Source (AFIP, Group, etc.)
63	-	Burn Severity Index
64	-	Mechanical Injury Severity Index
65	-	Radiation Severity Index
66	-	Calculated Ground Range to Hypocenter
67	-	Calculated (free air) Gamma

*Item number in case history record.

Table 9. Restricted data base--outside unshielded cases (continued).

Number	Case History Item*	Description
68	-	Calculated (free air) Neutron
69	-	Calculated Thermal Radiation Exposure
70	103	Other Hemorrhages

*Item number in case history record.

Table 10. Restricted data base--wood frame shielding.

Number	Case History Item*	Description
1	1	DW Master File Number
2	2	City Code
3	3	East/West Coordinate Location
4	4	North/South Coordinate Location
5	5	Coded Ground Range from Hypocenter
6	6	Location at Time of Burst (ATB)
7	7	Locator Number
8	8	Type of Building Construction
9	10	Number of Floors above Ground
10	19	Subject Location (ATB)
11	20	Floor Subject Located on (ATB)
12	22	Subject Location on Floor
13	23	Subject Location Relative to Openings
14	24	Physical Position of Subject
15	25	No. of Floors (or ceilings) shielding subject
16	26	Shielding Material of #25
17	27	Number of Walls Shielding Subject
18	28	Shielding Material of #27
19	29	Other Features Shielding Subject
20	36	Material Shielding Subject in Open
21	37	Data Source
22	38	Data Source File Number
23	48	Medical Condition Prior to Burst
24	49	Medical Condition Immediately After Burst (IAB)
25	71	Interview Date
26	72	Interview Reliability
27	73	Date of Birth
28	74	Sex
29	75	Age (ATB)
30	79	Prime Cause of Mechanical Injuries
31	80	Cuts, Lacerations, Punctures
32	81	Contusions, Abrasions
33	82	Fractured Bones

*Item number in case history record.

Table 10. Restricted data base--wood frame shielding (continued).

Number	Case History Item*	Description
34	83	Other Blast Effects
35	84	Severity of Mechanical Injuries
36	90	Percent Area Burned
37	91	Severity of Burns
38	92	Days to Vomiting Onset
39	93	Duration of Vomiting
40	94	Days to Diarrhea Onset
41	95	Duration of Diarrhea
42	96	Days to Bloody Diarrhea Onset
43	97	Malaise or Anorexia Present
44	98	Days to Onset of Gingivitis or Pharyngitis
45	99	Duration of Gingivitis or Pharyngitis
46	100	Days to Onset of Necrotic Ging. or Phary.
47	101	Days to Onset of Purpura or Petechiae
48	102	Duration of Purpura or Petechiae
49	104	Percent of Scalp Epilation
50	105	Days to Onset of Scalp Epilation
51	108	Reproductive System Abnormalities
52	109	Fever Onset
53	111	Date of Hospital Admittance
54	112	Date of Hospital Discharge
55	113	Place of Examination
56	114	Most Severe Injury
57	115	Second Most Severe Injury
58	116	Third Most Severe Injury
59	117	Major Complications
60	118	Other Complications
61	119	Type of Patient Treatment
62	120	Lowest Red Blood Cell Count
63	121	Lowest Hemoglobin
64	122	Lowest White Blood Cell Count
65	123	Date of First Treatment
66	124	Date Patient Last Seen
67	125	Blast Data Available

*Item number in case history record.

Table 10. Restricted data base--wood frame shielding (continued).

Number	Case History Item*	Description
68	127	Additional Items of Interest (Oak Ridge)
69	128	Additional Items of Interest (AFIP)
70	-	Record Source (AFIP, Group, etc.)
71	-	Burn Severity Index
72	-	Mechanical Injury Severity Index
73	-	Radiaton Severity Index
74	-	Calculated Ground Range to Hypocenter
75	-	Calculated (free air) Gamma
76	-	Calculated (free air) Neutron
77	-	Calculated 9-parameter Gamma Attenuation
78	-	Calculated 9-parameter Neutron Attenuation
79	-	Calculated Overpressure
80	-	Shielding Type (1=inside, 2=outside)
81	102	Other Hemorrhages

*Item number in case history record.

injury is indicated in one data item and not the other. For example: (114-116) may show burn injury, while (90-91) does not.

The general approach is to include the injury if either coding group indicates that one existed. By far the majority of cases show consistency between the two coding groups. For those cases where conflict exists, the more detailed information of (90-91) and (84) were used. In those few cases when degree of burn is shown, but burn area is missing and (114-116) cannot resolve the severity, first and second degree burns are included as moderate, while third degree burns are listed as severe. Cases showing burns or mechanical injury with the severity unknown are not included.

c. Cases were accepted as shielded by wood-frame when specific identification of wood building material was indicated. Cases were also accepted if the residential building material was unknown, since a preponderance of wood was used in construction. Cases that indicated an unknown location were not included; neither were those indicating shielding by another person or non-wood structures.

Counts of available data are listed in Table 11. Some small reduction in the numbers can be expected when the breakdown by thermal or overpressure level is made.

2.4 THERMAL RADIATION AND BLAST ENVIRONMENTS.

Since Kaman Sciences Corporation is responsible for revising and/or reviewing the thermal and blast sections of the revised edition of DNA EM-1, they recalculated prompt thermal radiation (cal/cm^2 vs. range) and blast (overpressures vs. range) for the Hiroshima and Nagasaki burst conditions. Of course, the thermal and blast predicted for these Japanese events will be revised when the accepted burst conditions have been re fined.

Review of these data shows little difference from thermal curves presented in DC-FR-1054, and used in our previous studies. Virtually no difference exists at close range. At long ranges (~24000 ft), Kaman predicts thermal values up to 13 percent higher. Values from the Hillendahl "Recipe Code" generally lie between the old DW values and the new Kaman values. Thermal data for Nagasaki will not be used in this study.

The revised data will not be incorporated at this time, however, since a consensus on weapon yield has not yet been obtained. Thermal and overpressure data will be changed once the yield questions have been resolved.

Table 11. Case histories available for this study.

HIROSHIMA--OUTSIDE UNSHIELDED

	Mechanical Injuries			
Burns	None	Moderate	Severe	Total
None	396	125	13	534
Moderate	1394	283	13	1690
Severe	1007	130	9	1146
Total	2797	538	35	3370

HIROSHIMA--WOOD FRAME SHIELDING

	Burns			
Mechanical	None	Moderate	Severe	Total
None	5926	691	117	6734
Moderate	6853	571	77	7501
Severe	606	62	16	684
Total	13385	1324	210	14919

NAGASAKI--WOOD FRAME SHIELDING

	Burns			
Mechanical	None	Moderate	Severe	Total
None	2534	300	110	2944
Moderate	1632	186	22	1840
Severe	228	28	10	266
Total	4394	514	142	5050

2.5 INJURY SYMPTOM DATA.

The summary counts of the injury symptom data available are shown in Appendix 2. The breakdown includes light burns and light mechanical injury categories. These were included to verify that the data base does not contain sufficient information to allow separate categories for them. Because of considerations in the data availability and coding, the light injury category will be included with the moderate injuries.

Counts of the cases with specific symptoms are shown for each of the shielding categories. For each injury category, the upper value of the pair indicates the number of cases that recorded the symptom indicated. The lower number represents the number of cases with symptom data available for each burn and mechanical injury. Some data are shown to ascertain whether sufficient information exists to examine synergistic effects. At this time no conclusions can be reached.

The coding key for the columns is:

VOMIT-ONSET	Onset and presence of vomiting
VOMIT-DUR	Duration of vomiting
DIARRHEA-ONSET	Onset and presence of diarrhea
DIARRHEA-DUR	Duration of diarrhea
BDIA-ONSET	Presence and onset of bloody diarrhea
MALS-ANOR	Presence of malaise and anorexia
GING & PHAR-DUR	Duration of gingivitis/pharyngitis
NG & P-ONSET	Presence and onset of necrotic gingivitis/pharyngitis
PURP/PET-ONSET	Presence and onset of purpura or petechaie
PURP/PET-DUR	Duration of purpura or petechaie
SCALP EPIL-PRCNT	Percent of scalp epilation
SCALP EPIL-ONSET	Presence and onset of scalp epilation
REPRO ABNOR	Abnormalities of reproductive system
FEVER ONSET	Onset and presence of fever
MAJOR COMPL	Major complications
RBC LWST	Data available on lowest red blood cell count
HEMO LWST	Data available on lowest hemoglobin, percent
WBC-LWST	Data available on lowest white blood cell count
HOSP-DISC	Hospital discharge data available

2.6 BURN AND MECHANICAL INJURIES RADIATION SYMPTOMS.

Appendix 3 contains the first set of data showing symptoms versus burn and mechanical injuries. The minimal doses were calculated using T65 information. The data present the percent of cases exhibiting various radiation symptoms as a function of calculated thermal exposure. Two cases are presented for Hiroshima outside unshielded: a low radiation (calculated less than 25 rads) and all radiation exposure cases. For each of the two cases, combinations of burn and mechanical injuries were developed. The combinations include none, moderate and severe for both burns and mechanical injuries.

It is important to remember that the thermal exposure is calculated using the range from the hypocenter for each case history. Use of the revised DS 86 weapon yields will alter the relationships between radiation, and thermal and overpressure exposure levels.

SECTION 3
LIST OF REFERENCES

1. Summers, D. L. and W. J. Slosarik, Biological Effects of Initial-Nuclear Radiation Based Upon the Japanese Data, DNA 5428F, Dikewood, DNA001-79-C-0024, August 29, 1980.

2. Effects of the Atomic Bomb on Nagasaki, Japan, U. S. Strategic Bombing Survey (USSBS) report, June 1947.

3. Medical Effects of Atomic Bombs, NP-3041 (July 6, 1951).

4. Blueprint at ORNL.

5. ORNL Layout Sketches.

6. Letter from R. L. Stohler, Dikewood Corporation, July 15, 1986.

APPENDIX A

HIROSHIMA DATA FOR WOOD FRAME AND OUTSIDE UNSHIELDED

(All thermal and pressure calculations made
using old weapon yield parameters)

HIROSHIMA **SUMMARY** WOOD FRAME

SEP 13, 1983 TOTAL REC: 18490 TOT UNINJURED: 3694

INJURED

RD	BN	NONE	MECHANICAL MN	MD	SV	TOTAL
N	N	*****	102	3544	276	4024
N	MN	7	1	5	1	14
N	MD	263	2	181	16	461
N	SV	33	2	27	5	72
N	TL	305	107	3857	302	4571
MN	N	103	3	292	16	369
MN	MN	0	0	0	0	0
MN	MD	11	0	16	3	30
MN	SV	3	1	2	2	8
MN	TL	122	4	280	21	407
MD	N	130	3	498	38	675
MD	MN	1	0	1	0	2
MD	MD	30	0	77	5	112
MD	SV	8	0	10	2	20
MD	TL	225	3	536	45	809
SV	N	143	6	386	63	578
SV	MN	0	0	1	0	1
SV	MD	31	0	51	3	85
SV	SV	4	0	3	1	8
SV	TL	178	6	421	67	672

BURNS	ALL RADIATION MECHANICAL				
N	497	114	4700	395	5646
MN	3	1	7	1	12
MD	332	2	325	29	688
SV	53	3	42	10	108
TL	930	120	5074	435	6459

RAD	ALL BURNS MECHANICAL				
N	305	107	3857	302	4571
MN	122	4	280	21	407
MD	225	3	536	45	809
SV	178	6	421	67	672
TL	830	120	5074	435	6459

RAD	ALL MECHANICAL BURNS				
N	4024	14	461	72	4571
MN	367	0	30	8	407
MD	675	2	112	20	809
SV	578	1	85	8	672
TL	5646	17	688	108	6459

MORTALLY INJURED

RD	BN	NONE	MECHANICAL MN	MD	SV	TOTAL
N	N	*****	0	92	7	99
N	MN	0	0	0	0	0
N	MD	23	0	8	2	33
N	SV	14	0	2	0	16
N	TL	37	0	102	9	148
MN	N	24	0	12	2	38
MN	MN	0	0	0	0	0
MN	MD	2	0	1	0	3
MN	SV	1	0	0	0	1
MN	TL	27	0	13	2	42
MD	N	38	0	33	1	72
MD	MN	0	0	0	0	0
MD	MD	4	0	1	0	5
MD	SV	1	0	1	0	2
MD	TL	43	0	35	1	79
SV	N	30	0	25	9	64
SV	MN	0	0	0	0	0
SV	MD	2	0	1	0	3
SV	SV	1	0	0	0	1
SV	TL	33	0	26	9	68

BURNS	ALL RADIATION MECHANICAL				
N	92	0	162	19	273
MN	0	0	0	0	0
MD	31	0	11	2	44
SV	17	0	3	0	20
TL	140	0	176	21	337

RAD	ALL BURNS MECHANICAL				
N	37	0	102	9	148
MN	27	0	13	2	42
MD	43	0	35	1	79
SV	33	0	26	9	68
TL	140	0	176	21	337

RAD	ALL MECHANICAL BURNS				
N	99	0	33	16	148
MN	38	0	3	1	42
MD	72	0	5	2	79
SV	64	0	3	1	68
TL	273	0	44	20	337

KILLED IMMEDIATELY

RD	BN	NONE	MECHANICAL MN	MD	SV	TOTAL
N	N	*****	0	20	9	29
N	MN	0	0	0	0	0
N	MD	244	0	4	2	250
N	SV	113	0	1	0	114
N	TL	357	0	25	11	393
MN	N	0	0	0	0	0
MN	MN	0	0	0	0	0
MN	MD	0	0	0	0	0
MN	SV	0	0	0	0	0
MN	TL	0	0	0	0	0
MD	N	0	0	0	0	0
MD	MN	0	0	0	0	0
MD	MD	0	0	0	0	0
MD	SV	0	0	0	0	0
MD	TL	0	0	0	0	0
SV	N	0	0	0	0	0
SV	MN	0	0	0	0	0
SV	MD	0	0	0	0	0
SV	SV	0	0	0	0	0
SV	TL	0	0	0	0	0

BURNS	ALL RADIATION MECHANICAL				
N	0	0	20	9	29
MN	0	0	0	0	0
MD	244	0	4	2	250
SV	113	0	1	0	114
TL	357	0	25	11	393

RAD	ALL BURNS MECHANICAL				
N	357	0	25	11	393
MN	0	0	0	0	0
MD	0	0	0	0	0
SV	0	0	0	0	0
TL	357	0	25	11	393

RAD	ALL MECHANICAL BURNS				
N	29	0	250	114	393
MN	0	0	0	0	0
MD	0	0	0	0	0
SV	0	0	0	0	0
TL	29	0	250	114	393

SEP 22, 1983 WOOD FRAME HIROSHIMA GROUPS PERCENT INJURY-- MECH NO RAD NO BURNS

LIGHT MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	4	93	4.3
1.0- 1.5	13	184	7.1
1.5- 2.0	8	125	6.4
2.0- 2.5	16	221	7.2
2.5- 3.0	7	208	3.4
3.0- 3.5	13	552	2.4
3.5- 4.0	12	738	1.6
4.0- 4.5	8	820	1.0
4.5- 5.0	12	857	1.4
5.0- 5.5	1	962	0.1
5.5- 6.0	1	878	0.1
6.0- 7.0	5	1670	0.3
7.0- 8.0	1	1077	0.1
8.0- 10.0	2	927	0.2
10.0- 12.0	1	501	0.2
12.0- 13.0	0	122	0.0
13.0- 14.0	0	109	0.0
14.0- 16.0	0	7	0.0
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	132		

MOD MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	14	93	15.1
1.0- 1.5	51	184	27.7
1.5- 2.0	42	125	33.6
2.0- 2.5	80	221	36.2
2.5- 3.0	77	208	37.0
3.0- 3.5	192	552	34.8
3.5- 4.0	258	738	35.0
4.0- 4.5	346	820	42.2
4.5- 5.0	334	857	39.0
5.0- 5.5	404	962	42.0
5.5- 6.0	422	878	48.1
6.0- 7.0	725	1670	43.4
7.0- 8.0	407	1077	37.8
8.0- 10.0	230	927	24.8
10.0- 12.0	53	501	10.6
12.0- 13.0	3	122	2.5
13.0- 14.0	4	109	3.7
14.0- 16.0	2	7	28.6
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	3644		

SEVERE MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	0	93	0.0
1.0- 1.5	3	184	1.6
1.5- 2.0	2	125	1.6
2.0- 2.5	17	221	7.7
2.5- 3.0	18	208	8.7
3.0- 3.5	45	552	8.2
3.5- 4.0	15	738	2.0
4.0- 4.5	30	820	3.7
4.5- 5.0	23	857	2.7
5.0- 5.5	29	962	3.0
5.5- 6.0	11	878	1.3
6.0- 7.0	37	1670	2.2
7.0- 8.0	15	1077	1.4
8.0- 10.0	21	927	2.3
10.0- 12.0	7	501	1.4
12.0- 13.0	2	122	1.6
13.0- 14.0	2	109	1.8
14.0- 16.0	1	7	14.3
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	278		

SEP 22, 1983 WOOD FRAME HIROSHIMA GROUPS PERCENT INJURY-- MECH LIGHT RAD NO BURNS

PSI	LIGHT MECH CASES	LIGHT MECH TOTAL	LIGHT MECH PERCENT	MOD MECH CASES	MOD MECH TOTAL	MOD MECH PERCENT	SEVERE MECH CASES	SEVERE MECH TOTAL	SEVERE MECH PERCENT
0.5- 1.0	4	93	4.3	14	93	15.1	0	93	0.0
1.0- 1.5	13	184	7.1	51	184	27.7	3	184	1.6
1.5- 2.0	8	125	6.4	42	125	33.6	2	125	1.6
2.0- 2.5	16	221	7.2	80	221	36.2	17	221	7.7
2.5- 3.0	7	208	3.4	77	208	37.0	18	208	8.7
3.0- 3.5	14	552	2.5	199	552	36.1	45	552	8.2
3.5- 4.0	12	738	1.6	277	738	37.5	17	738	2.3
4.0- 4.5	3	820	1.0	355	820	43.3	31	820	3.8
4.5- 5.0	12	857	1.4	340	857	39.7	23	857	2.7
5.0- 5.5	1	962	0.1	423	962	44.0	30	962	3.1
5.5- 6.0	1	878	0.1	436	878	49.7	12	878	1.4
6.0- 7.0	6	1670	0.4	775	1670	46.4	40	1670	2.4
7.0- 8.0	1	1077	0.1	451	1077	41.9	17	1077	1.6
8.0- 10.0	5	927	0.5	286	927	30.9	22	927	2.4
10.0- 12.0	2	501	0.4	67	501	13.4	8	501	1.6
12.0- 13.0	0	122	0.0	5	122	4.1	3	122	2.5
13.0- 14.0	0	109	0.0	6	109	5.5	4	109	3.7
14.0- 16.0	0	7	0.0	2	7	28.6	1	7	14.3
16.0- 18.0	0	0	*****	0	0	*****	0	0	*****
18.0- 20.0	0	0	*****	0	0	*****	0	0	*****
20.0- 25.0	0	6	0.0	0	6	0.0	1	6	16.7
25.0- 30.0	0	0	*****	0	0	*****	0	0	*****
	105			3886			294		

SEP 22, 1983 WOOD FRAME HIROSHIMA GROUPS PERCENT INJURY-- MECH MOD RAD NO BURNS

LIGHT MECH PSI	CASES	TOTAL	PERCENT
0.5- 1.0	4	93	4.3
1.0- 1.5	13	184	7.1
1.5- 2.0	8	125	6.4
2.0- 2.5	16	221	7.2
2.5- 3.0	7	208	3.4
3.0- 3.5	13	552	2.4
3.5- 4.0	12	738	1.6
4.0- 4.5	8	820	1.0
4.5- 5.0	12	857	1.4
5.0- 5.5	1	962	0.1
5.5- 6.0	1	878	0.1
6.0- 7.0	5	1670	0.3
7.0- 8.0	2	1077	0.2
8.0- 10.0	1	927	0.1
10.0- 12.0	1	501	0.2
12.0- 13.0	1	122	0.8
13.0- 14.0	0	109	0.0
14.0- 16.0	0	7	0.0
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	105		

MOD MECH PSI	CASES	TOTAL	PERCENT
0.5- 1.0	14	93	15.1
1.0- 1.5	51	184	27.7
1.5- 2.0	42	125	33.6
2.0- 2.5	80	221	36.2
2.5- 3.0	77	208	37.0
3.0- 3.5	200	552	36.2
3.5- 4.0	278	738	37.7
4.0- 4.5	365	820	44.5
4.5- 5.0	356	857	41.5
5.0- 5.5	428	962	44.5
5.5- 6.0	445	878	50.7
6.0- 7.0	779	1670	46.6
7.0- 8.0	469	1077	43.5
8.0- 10.0	337	927	36.4
10.0- 12.0	127	501	25.3
12.0- 13.0	24	122	19.7
13.0- 14.0	18	109	16.5
14.0- 16.0	2	7	28.6
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	4092		

SEVERE MECH PSI	CASES	TOTAL	PERCENT
0.5- 1.0	0	93	0.0
1.0- 1.5	3	184	1.6
1.5- 2.0	2	125	1.6
2.0- 2.5	17	221	7.7
2.5- 3.0	18	208	8.7
3.0- 3.5	47	552	8.5
3.5- 4.0	17	738	2.3
4.0- 4.5	32	820	3.9
4.5- 5.0	23	857	2.7
5.0- 5.5	30	962	3.1
5.5- 6.0	14	878	1.6
6.0- 7.0	39	1670	2.3
7.0- 8.0	20	1077	1.9
8.0- 10.0	27	927	2.9
10.0- 12.0	13	501	2.6
12.0- 13.0	8	122	6.6
13.0- 14.0	5	109	4.6
14.0- 16.0	1	7	14.3
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	316		

SEP 22, 1953 WOOD FRAME HIROSHIMA GROUPS PERCENT INJURY-- MECH SEVERE RAD NO BURNS

PSI	LIGHT MECH CASES	LIGHT MECH TOTAL	LIGHT MECH PERCENT	MOD MECH CASES	MOD MECH TOTAL	MOD MECH PERCENT	SEVERE MECH CASES	SEVERE MECH TOTAL	SEVERE MECH PERCENT
0.5- 1.0	4	93	4.3	14	93	15.1	0	93	0.0
1.0- 1.5	13	184	7.1	51	184	27.7	3	184	1.6
1.5- 2.0	8	125	6.4	42	125	33.6	2	125	1.6
2.0- 2.5	16	221	7.2	80	221	36.2	17	221	7.7
2.5- 3.0	7	208	3.4	77	208	37.0	18	208	8.7
3.0- 3.5	13	552	2.4	194	552	35.1	46	552	8.3
3.5- 4.0	12	738	1.6	264	738	35.8	17	738	2.3
4.0- 4.5	8	820	1.0	351	820	42.8	30	820	3.7
4.5- 5.0	12	857	1.4	335	857	39.1	23	857	2.7
5.0- 5.5	1	962	0.1	409	962	42.5	29	962	3.0
5.5- 6.0	1	878	0.1	432	878	49.2	12	878	1.4
6.0- 7.0	5	1670	0.3	740	1670	44.3	43	1670	2.6
7.0- 8.0	1	1077	0.1	432	1077	40.1	23	1077	2.1
8.0- 10.0	1	927	0.1	351	927	37.9	30	927	3.2
10.0- 12.0	3	501	0.6	162	501	32.3	30	501	6.0
12.0- 13.0	1	122	0.8	34	122	27.9	10	122	8.2
13.0- 14.0	1	109	0.9	35	109	33.0	6	109	5.5
14.0- 16.0	1	7	14.3	3	7	42.9	2	7	28.6
16.0- 18.0	0	0	*****	0	0	*****	0	0	*****
18.0- 20.0	0	0	*****	0	0	*****	0	0	*****
20.0- 25.0	0	6	0.0	3	6	50.0	0	6	0.0
25.0- 30.0	0	0	*****	0	0	*****	0	0	*****
	108			4010			341		

SEP 22, 1983 WOOD FRAME HIROSHIMA GROUPS PERCENT INJURY-- MECH NO RAD LIGHT BURNS

PSI	LIGHT MECH CASES	LIGHT MECH TOTAL	LIGHT MECH PERCENT	MOD MECH CASES	MOD MECH TOTAL	MOD MECH PERCENT	SEVERE MECH CASES	SEVERE MECH TOTAL	SEVERE MECH PERCENT
0.5- 1.0	4	93	4.3	14	93	15.1	0	93	0.0
1.0- 1.5	13	184	7.1	51	184	27.7	3	184	1.6
1.5- 2.0	8	125	6.4	42	125	33.6	2	125	1.6
2.0- 2.5	16	221	7.2	82	221	37.1	17	221	7.7
2.5- 3.0	7	208	3.4	77	208	37.0	18	208	8.7
3.0- 3.5	13	552	2.4	192	552	34.8	46	552	8.3
3.5- 4.0	13	738	1.8	259	738	35.1	15	738	2.0
4.0- 4.5	9	820	1.0	346	820	42.2	30	820	3.7
4.5- 5.0	12	857	1.4	334	857	39.0	23	857	2.7
5.0- 5.5	1	962	0.1	404	962	42.0	29	962	3.0
5.5- 6.0	1	878	0.1	423	878	48.2	11	878	1.3
6.0- 7.0	5	1670	0.3	725	1670	43.4	37	1670	2.2
7.0- 8.0	1	1077	0.1	407	1077	37.8	15	1077	1.4
8.0- 10.0	0	927	0.0	230	927	24.8	21	927	2.3
10.0- 12.0	1	501	0.2	54	501	10.8	7	501	1.4
12.0- 13.0	0	122	0.0	3	122	2.5	2	122	1.6
13.0- 14.0	0	109	0.0	4	109	3.7	2	109	1.8
14.0- 16.0	0	7	0.0	2	7	28.6	1	7	14.3
16.0- 18.0	0	0	*****	0	0	*****	0	0	*****
18.0- 20.0	0	0	*****	0	0	*****	0	0	*****
20.0- 25.0	0	6	0.0	0	6	0.0	0	6	0.0
25.0- 30.0	0	0	*****	0	0	*****	0	0	*****
	105			3649			279		

SEP 22, 1983 WOOD FRAME HIROSHIMA GROUPS PERCENT INJURY-- MECH LIGHT RAD LIGHT BURNS

LIGHT MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	4	93	4.3
1.0- 1.5	13	184	7.1
1.5- 2.0	8	125	6.4
2.0- 2.5	16	221	7.2
2.5- 3.0	7	208	3.4
3.0- 3.5	14	552	2.5
3.5- 4.0	13	738	1.8
4.0- 4.5	8	820	1.0
4.5- 5.0	12	857	1.4
5.0- 5.5	1	962	0.1
5.5- 6.0	1	878	0.1
6.0- 7.0	6	1670	0.4
7.0- 8.0	1	1077	0.1
8.0- 10.0	0	927	0.0
10.0- 12.0	2	501	0.4
12.0- 13.0	0	122	0.0
13.0- 14.0	0	109	0.0
14.0- 16.0	0	7	0.0
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	136		

MOD MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	14	93	15.1
1.0- 1.5	51	184	27.7
1.5- 2.0	42	125	33.6
2.0- 2.5	82	221	37.1
2.5- 3.0	77	208	37.0
3.0- 3.5	199	552	36.1
3.5- 4.0	278	738	37.7
4.0- 4.5	355	820	43.3
4.5- 5.0	340	857	39.7
5.0- 5.5	423	962	44.0
5.5- 6.0	437	878	49.8
6.0- 7.0	775	1670	46.4
7.0- 8.0	451	1077	41.9
8.0- 10.0	286	927	30.9
10.0- 12.0	68	501	13.6
12.0- 13.0	5	122	4.1
13.0- 14.0	6	109	5.5
14.0- 16.0	2	7	28.6
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	3891		

SEVERE MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	0	93	0.0
1.0- 1.5	3	184	1.6
1.5- 2.0	2	125	1.6
2.0- 2.5	17	221	7.7
2.5- 3.0	18	208	8.7
3.0- 3.5	46	552	8.3
3.5- 4.0	17	738	2.3
4.0- 4.5	31	820	3.8
4.5- 5.0	23	857	2.7
5.0- 5.5	30	962	3.1
5.5- 6.0	12	878	1.4
6.0- 7.0	40	1670	2.4
7.0- 8.0	17	1077	1.6
8.0- 10.0	22	927	2.4
10.0- 12.0	8	501	1.6
12.0- 13.0	3	122	2.5
13.0- 14.0	4	109	3.7
14.0- 16.0	1	7	14.3
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	1	6	16.7
25.0- 30.0	0	0	*****
	295		

SEP 22, 1983 WOOD FRAME HIROSHIMA GROUPS PERCENT INJURY-- MECH MOD RAD LIGHT BURNS

PSI	LIGHT MECH CASES	LIGHT MECH TOTAL	LIGHT MECH PERCENT	MOD MECH CASES	MOD MECH TOTAL	MOD MECH PERCENT	SEVERE MECH CASES	SEVERE MECH TOTAL	SEVERE MECH PERCENT
0.5- 1.0	4	93	4.3	14	93	15.1	0	93	0.0
1.0- 1.5	13	184	7.1	51	184	27.7	3	184	1.6
1.5- 2.0	8	125	6.4	42	125	33.6	2	125	1.6
2.0- 2.5	16	221	7.2	82	221	37.1	17	221	7.7
2.5- 3.0	7	208	3.4	77	208	37.0	18	208	8.7
3.0- 3.5	13	552	2.4	200	552	36.2	48	552	8.7
3.5- 4.0	13	738	1.8	279	738	37.8	17	738	2.3
4.0- 4.5	8	820	1.0	365	820	44.5	32	820	3.9
4.5- 5.0	12	857	1.4	356	857	41.5	23	857	2.7
5.0- 5.5	1	962	0.1	428	962	44.5	30	962	3.1
5.5- 6.0	1	878	0.1	446	878	50.8	14	878	1.6
6.0- 7.0	5	1670	0.3	779	1670	46.6	39	1670	2.3
7.0- 8.0	2	1077	0.2	470	1077	43.6	20	1077	1.9
8.0- 10.0	1	927	0.1	337	927	36.4	27	927	2.9
10.0- 12.0	1	501	0.2	128	501	25.5	13	501	2.6
12.0- 13.0	1	122	0.8	24	122	19.7	8	122	6.6
13.0- 14.0	0	109	0.0	18	109	16.5	5	109	4.6
14.0- 16.0	0	7	0.0	2	7	28.6	1	7	14.3
16.0- 18.0	0	0	*****	0	0	*****	0	0	*****
18.0- 20.0	0	0	*****	0	0	*****	0	0	*****
20.0- 25.0	0	6	0.0	0	6	0.0	0	6	0.0
25.0- 30.0	0	0	*****	0	0	*****	0	0	*****
	106			4098			317		

SEP 22, 1983 WOOD FRAME HIROSHIMA GROUPS PERCENT INJURY-- MECH SEVERE RAD LIGHT BURNS

LIGHT MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	4	93	4.3
1.0- 1.5	13	184	7.1
1.5- 2.0	8	125	6.4
2.0- 2.5	16	221	7.2
2.5- 3.0	7	208	3.4
3.0- 3.5	13	552	2.4
3.5- 4.0	13	738	1.8
4.0- 4.5	8	820	1.0
4.5- 5.0	12	857	1.4
5.0- 5.5	1	962	0.1
5.5- 6.0	1	878	0.1
6.0- 7.0	5	1670	0.3
7.0- 8.0	1	1077	0.1
8.0- 10.0	1	927	0.1
10.0- 12.0	3	501	0.6
12.0- 13.0	1	122	0.8
13.0- 14.0	1	109	0.9
14.0- 16.0	1	7	14.3
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	109		

MOD MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	14	93	15.1
1.0- 1.5	51	184	27.7
1.5- 2.0	42	125	33.6
2.0- 2.5	82	221	37.1
2.5- 3.0	77	208	37.0
3.0- 3.5	194	552	35.1
3.5- 4.0	265	738	35.9
4.0- 4.5	351	820	42.8
4.5- 5.0	335	857	39.1
5.0- 5.5	409	962	42.5
5.5- 6.0	433	878	49.3
6.0- 7.0	740	1670	44.3
7.0- 8.0	432	1077	40.1
8.0- 10.0	351	927	37.9
10.0- 12.0	163	501	32.5
12.0- 13.0	34	122	27.9
13.0- 14.0	37	109	33.9
14.0- 16.0	3	7	42.9
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	3	6	50.0
25.0- 30.0	0	0	*****
	4016		

SEVERE MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	0	93	0.0
1.0- 1.5	3	184	1.6
1.5- 2.0	2	125	1.6
2.0- 2.5	17	221	7.7
2.5- 3.0	18	208	8.7
3.0- 3.5	47	552	8.5
3.5- 4.0	17	738	2.3
4.0- 4.5	30	820	3.7
4.5- 5.0	23	857	2.7
5.0- 5.5	29	962	3.0
5.5- 6.0	12	878	1.4
6.0- 7.0	43	1670	2.6
7.0- 8.0	23	1077	2.1
8.0- 10.0	30	927	3.2
10.0- 12.0	30	501	6.0
12.0- 13.0	10	122	8.2
13.0- 14.0	6	109	5.5
14.0- 16.0	2	7	28.6
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	342		

SEP 22, 1983 WOOD FRAME HIROSHIMA GROUPS PERCENT INJURY-- MECH NO RAD MOD BURNS

PSI	LIGHT MECH CASES	TOTAL	PERCENT	MOD MECH CASES	TOTAL	PERCENT	SEVERE MECH CASES	TOTAL	PERCENT
0.5- 1.0	4	93	4.3	14	93	15.1	0	93	0.0
1.0- 1.5	13	184	7.1	51	184	27.7	3	184	1.6
1.5- 2.0	10	125	8.0	44	125	35.2	2	125	1.6
2.0- 2.5	16	221	7.2	81	221	36.7	17	221	7.7
2.5- 3.0	7	208	3.4	80	208	38.5	21	208	10.1
3.0- 3.5	13	552	2.4	201	552	36.4	47	552	8.5
3.5- 4.0	12	738	1.6	267	738	36.2	16	738	2.2
4.0- 4.5	8	820	1.0	361	820	44.0	31	820	3.8
4.5- 5.0	12	857	1.4	348	857	40.6	25	857	2.9
5.0- 5.5	1	962	0.1	430	962	44.7	31	962	3.2
5.5- 6.0	1	878	0.1	439	878	50.0	15	878	1.7
6.0- 7.0	5	1670	0.3	767	1670	45.9	39	1670	2.3
7.0- 8.0	1	1077	0.1	439	1077	40.8	16	1077	1.5
8.0- 10.0	0	927	0.0	238	927	25.7	21	927	2.3
10.0- 12.0	1	501	0.2	54	501	10.8	7	501	1.4
12.0- 13.0	0	122	0.0	4	122	3.3	2	122	1.6
13.0- 14.0	0	109	0.0	5	109	4.6	2	109	1.8
14.0- 16.0	0	7	0.0	2	7	28.6	1	7	14.3
16.0- 18.0	0	0	*****	0	0	*****	0	0	*****
18.0- 20.0	0	0	*****	0	0	*****	0	0	*****
20.0- 25.0	0	6	0.0	0	6	0.0	0	6	0.0
25.0- 30.0	0	0	*****	0	0	*****	0	0	*****
	104			3825			296		

SEP 22, 1983 WOOD FRAME HIROSHIMA GROUPS PERCENT INJURY-- MECH LIGHT RAD MOD BURNS

LIGHT MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	4	93	4.3
1.0- 1.5	13	184	7.1
1.5- 2.0	10	125	8.0
2.0- 2.5	16	221	7.2
2.5- 3.0	7	208	3.4
3.0- 3.5	14	552	2.5
3.5- 4.0	12	738	1.6
4.0- 4.5	8	820	1.0
4.5- 5.0	12	857	1.4
5.0- 5.5	1	962	0.1
5.5- 6.0	1	878	0.1
6.0- 7.0	6	1670	0.4
7.0- 8.0	1	1077	0.1
8.0- 10.0	0	927	0.0
10.0- 12.0	2	501	0.4
12.0- 13.0	0	122	0.0
13.0- 14.0	0	109	0.0
14.0- 16.0	0	7	0.0
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	107		

MOD MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	14	93	15.1
1.0- 1.5	51	184	27.7
1.5- 2.0	44	125	35.2
2.0- 2.5	81	221	36.7
2.5- 3.0	80	208	38.5
3.0- 3.5	209	552	37.9
3.5- 4.0	286	738	38.8
4.0- 4.5	370	820	45.1
4.5- 5.0	355	857	41.4
5.0- 5.5	452	962	47.0
5.5- 6.0	455	878	51.8
6.0- 7.0	820	1670	49.1
7.0- 8.0	486	1077	45.1
8.0- 10.0	296	927	31.9
10.0- 12.0	69	501	13.8
12.0- 13.0	6	122	4.9
13.0- 14.0	7	109	6.4
14.0- 16.0	2	7	28.6
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	4083		

SEVERE MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	0	93	0.0
1.0- 1.5	3	184	1.6
1.5- 2.0	2	125	1.6
2.0- 2.5	17	221	7.7
2.5- 3.0	21	208	10.1
3.0- 3.5	47	552	8.5
3.5- 4.0	18	738	2.4
4.0- 4.5	33	820	4.0
4.5- 5.0	25	857	2.9
5.0- 5.5	32	962	3.3
5.5- 6.0	16	878	1.8
6.0- 7.0	42	1670	2.5
7.0- 8.0	19	1077	1.8
8.0- 10.0	22	927	2.4
10.0- 12.0	8	501	1.6
12.0- 13.0	3	122	2.5
13.0- 14.0	5	109	4.6
14.0- 16.0	1	7	14.3
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	1	6	16.7
25.0- 30.0	0	0	*****
	315		

SEP 22, 1983 WOOD FRAME HIROSHIMA GROUPS PERCENT INJURY-- MECH MOD RAD MOD BURNS

LIGHT MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	9	93	9.7
1.0- 1.5	13	184	7.1
1.5- 2.0	10	125	8.0
2.0- 2.5	16	221	7.2
2.5- 3.0	7	208	3.4
3.0- 3.5	13	552	2.4
3.5- 4.0	12	738	1.6
4.0- 4.5	8	820	1.0
4.5- 5.0	12	857	1.4
5.0- 5.5	1	962	0.1
5.5- 6.0	1	878	0.1
6.0- 7.0	5	1670	0.3
7.0- 8.0	2	1077	0.2
8.0- 10.0	1	927	0.1
10.0- 12.0	1	501	0.2
12.0- 13.0	1	122	0.8
13.0- 14.0	0	109	0.0
14.0- 16.0	0	7	0.0
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	107		

MOD MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	14	93	15.1
1.0- 1.5	51	184	27.7
1.5- 2.0	44	125	35.2
2.0- 2.5	81	221	36.7
2.5- 3.0	80	208	38.5
3.0- 3.5	211	552	38.2
3.5- 4.0	274	738	37.2
4.0- 4.5	383	820	46.7
4.5- 5.0	374	857	43.6
5.0- 5.5	457	962	47.5
5.5- 6.0	470	878	53.5
6.0- 7.0	837	1670	50.1
7.0- 8.0	510	1077	47.4
8.0- 10.0	360	927	38.8
10.0- 12.0	140	501	27.9
12.0- 13.0	26	122	21.3
13.0- 14.0	21	109	19.3
14.0- 16.0	2	7	28.6
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	4350		

SEVERE MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	0	93	0.0
1.0- 1.5	3	184	1.6
1.5- 2.0	2	125	1.6
2.0- 2.5	17	221	7.7
2.5- 3.0	21	208	10.1
3.0- 3.5	49	552	8.9
3.5- 4.0	18	738	2.4
4.0- 4.5	33	820	4.0
4.5- 5.0	25	857	2.9
5.0- 5.5	32	962	3.3
5.5- 6.0	19	878	2.2
6.0- 7.0	42	1670	2.5
7.0- 8.0	22	1077	2.0
8.0- 10.0	27	927	2.9
10.0- 12.0	15	501	3.0
12.0- 13.0	8	122	6.6
13.0- 14.0	5	109	4.6
14.0- 16.0	1	7	14.3
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	339		

SEP 26, 1983 4000 FRAME HIROSHIMA GROUPS PERCENT INJURY-- MECH SEVERE RAD MOD BURNS

LIGHT MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	4	93	4.3
1.0- 1.5	13	184	7.1
1.5- 2.0	10	125	8.0
2.0- 2.5	16	221	7.2
2.5- 3.0	7	208	3.4
3.0- 3.5	13	552	2.4
3.5- 4.0	12	738	1.6
4.0- 4.5	8	820	1.0
4.5- 5.0	12	857	1.4
5.0- 5.5	1	962	0.1
5.5- 6.0	1	878	0.1
6.0- 7.0	5	1670	0.3
7.0- 8.0	1	1077	0.1
8.0- 10.0	1	927	0.1
10.0- 12.0	3	501	0.6
12.0- 13.0	1	122	0.8
13.0- 14.0	1	109	0.9
14.0- 16.0	1	7	14.3
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	110		

MOD MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	14	93	15.1
1.0- 1.5	51	184	27.7
1.5- 2.0	44	125	35.2
2.0- 2.5	81	221	36.7
2.5- 3.0	80	208	38.5
3.0- 3.5	203	552	36.8
3.5- 4.0	274	738	37.1
4.0- 4.5	367	820	44.8
4.5- 5.0	350	857	40.8
5.0- 5.5	437	962	45.4
5.5- 6.0	449	878	51.1
6.0- 7.0	785	1670	47.0
7.0- 8.0	470	1077	43.6
8.0- 10.0	372	927	40.1
10.0- 12.0	179	501	35.7
12.0- 13.0	38	122	31.1
13.0- 14.0	40	109	36.7
14.0- 16.0	4	7	57.1
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	4	6	66.7
25.0- 30.0	0	0	*****
	4242		

SEVERE MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	0	93	0.0
1.0- 1.5	3	184	1.6
1.5- 2.0	2	125	1.6
2.0- 2.5	17	221	7.7
2.5- 3.0	21	208	10.1
3.0- 3.5	48	552	8.7
3.5- 4.0	18	738	2.4
4.0- 4.5	31	820	3.8
4.5- 5.0	25	857	2.9
5.0- 5.5	31	962	3.2
5.5- 6.0	16	876	1.8
6.0- 7.0	45	1670	2.7
7.0- 8.0	24	1077	2.2
8.0- 10.0	31	927	3.3
10.0- 12.0	31	501	6.2
12.0- 13.0	10	122	8.2
13.0- 14.0	7	109	6.4
14.0- 16.0	2	7	28.6
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	362		

SEP 22, 1983 WOOD FRAME HIROSHIMA GROUPS PERCENT INJURY-- MECH NO RAD SEVERE BURNS

LIGHT MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	9	93	9.7
1.0- 1.5	13	184	7.1
1.5- 2.0	9	125	7.2
2.0- 2.5	16	221	7.2
2.5- 3.0	7	208	3.4
3.0- 3.5	13	552	2.4
3.5- 4.0	12	738	1.6
4.0- 4.5	8	820	1.0
4.5- 5.0	13	857	1.5
5.0- 5.5	1	962	0.1
5.5- 6.0	1	878	0.1
6.0- 7.0	5	1670	0.3
7.0- 8.0	1	1077	0.1
8.0- 10.0	0	927	0.0
10.0- 12.0	1	501	0.2
12.0- 13.0	0	122	0.0
13.0- 14.0	0	109	0.0
14.0- 16.0	0	7	0.0
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	104		

MOD MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	14	93	15.1
1.0- 1.5	51	184	27.7
1.5- 2.0	42	125	33.6
2.0- 2.5	81	221	36.7
2.5- 3.0	81	208	38.9
3.0- 3.5	194	552	35.1
3.5- 4.0	259	738	35.1
4.0- 4.5	348	820	42.4
4.5- 5.0	335	857	39.1
5.0- 5.5	408	962	42.4
5.5- 6.0	424	878	48.3
6.0- 7.0	732	1670	43.8
7.0- 8.0	410	1077	38.1
8.0- 10.0	230	927	24.8
10.0- 12.0	53	501	10.6
12.0- 13.0	3	122	2.5
13.0- 14.0	4	109	3.7
14.0- 16.0	2	7	28.6
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	3671		

SEVERE MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	0	93	0.0
1.0- 1.5	3	184	1.6
1.5- 2.0	2	125	1.6
2.0- 2.5	17	221	7.7
2.5- 3.0	18	208	8.7
3.0- 3.5	46	552	8.3
3.5- 4.0	15	738	2.0
4.0- 4.5	33	820	4.0
4.5- 5.0	23	857	2.7
5.0- 5.5	29	962	3.0
5.5- 6.0	11	878	1.3
6.0- 7.0	38	1670	2.3
7.0- 8.0	15	1077	1.4
8.0- 10.0	21	927	2.3
10.0- 12.0	7	501	1.4
12.0- 13.0	2	122	1.6
13.0- 14.0	2	109	1.8
14.0- 16.0	1	7	14.3
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	283		

SEP 22, 1983 WOOD FRAME HIROSHIMA GROUPS PERCENT INJURY-- MECH LIGHT RAD SEVERE BURNS

LIGHT MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	4	93	4.3
1.0- 1.5	13	184	7.1
1.5- 2.0	9	125	7.2
2.0- 2.5	16	221	7.2
2.5- 3.0	7	208	3.4
3.0- 3.5	14	552	2.5
3.5- 4.0	12	738	1.6
4.0- 4.5	8	820	1.0
4.5- 5.0	13	857	1.5
5.0- 5.5	1	962	0.1
5.5- 6.0	1	878	0.1
6.0- 7.0	6	1670	0.4
7.0- 8.0	1	1077	0.1
8.0- 10.0	3	927	0.3
10.0- 12.0	2	501	0.4
12.0- 13.0	1	122	0.8
13.0- 14.0	0	109	0.0
14.0- 16.0	0	7	0.0
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	108		

MOD MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	14	93	15.1
1.0- 1.5	51	184	27.7
1.5- 2.0	42	125	33.6
2.0- 2.5	81	221	36.7
2.5- 3.0	81	208	38.9
3.0- 3.5	201	552	36.4
3.5- 4.0	278	738	37.7
4.0- 4.5	357	820	43.5
4.5- 5.0	341	857	39.8
5.0- 5.5	427	962	44.4
5.5- 6.0	438	878	49.9
6.0- 7.0	783	1670	46.9
7.0- 8.0	454	1077	42.2
8.0- 10.0	286	927	30.9
10.0- 12.0	67	501	13.4
12.0- 13.0	6	122	4.9
13.0- 14.0	6	109	5.5
14.0- 16.0	2	7	28.6
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	3915		

SEVERE MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	0	93	0.0
1.0- 1.5	3	184	1.6
1.5- 2.0	2	125	1.6
2.0- 2.5	17	221	7.7
2.5- 3.0	18	208	8.7
3.0- 3.5	46	552	8.3
3.5- 4.0	17	738	2.3
4.0- 4.5	35	820	4.3
4.5- 5.0	23	857	2.7
5.0- 5.5	30	962	3.1
5.5- 6.0	13	878	1.5
6.0- 7.0	41	1670	2.5
7.0- 8.0	17	1077	1.6
8.0- 10.0	22	927	2.4
10.0- 12.0	8	501	1.6
12.0- 13.0	3	122	2.5
13.0- 14.0	4	109	3.7
14.0- 16.0	1	7	14.3
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	1	6	16.7
25.0- 30.0	0	0	*****
	301		

SEP 22, 1983 WOOD FRAME HIROSHIMA GROUPS PERCENT INJURY-- MECH MOD R&D SEVERE BURNS

LIGHT MECH					MOD MECH					SEVERE MECH				
PSI		CASES	TOTAL	PERCENT	PSI		CASES	TOTAL	PERCENT	PSI		CASES	TOTAL	PERCENT
0.5-	1.0	4	93	4.3	0.5-	1.0	14	93	15.1	0.5-	1.0	0	93	0.0
1.0-	1.5	13	184	7.1	1.0-	1.5	51	184	27.7	1.0-	1.5	3	184	1.6
1.5-	2.0	9	125	7.2	1.5-	2.0	42	125	33.6	1.5-	2.0	2	125	1.6
2.0-	2.5	16	221	7.2	2.0-	2.5	81	221	36.7	2.0-	2.5	17	221	7.7
2.5-	3.0	7	208	3.4	2.5-	3.0	81	208	38.9	2.5-	3.0	18	208	8.7
3.0-	3.5	13	552	2.4	3.0-	3.5	202	552	36.6	3.0-	3.5	49	552	8.9
3.5-	4.0	12	738	1.6	3.5-	4.0	279	738	37.8	3.5-	4.0	17	738	2.3
4.0-	4.5	8	820	1.0	4.0-	4.5	368	820	44.9	4.0-	4.5	35	820	4.3
4.5-	5.0	13	857	1.5	4.5-	5.0	358	857	41.8	4.5-	5.0	23	857	2.7
5.0-	5.5	1	962	0.1	5.0-	5.5	432	962	44.9	5.0-	5.5	30	962	3.1
5.5-	6.0	1	878	0.1	5.5-	6.0	449	878	51.1	5.5-	6.0	14	878	1.6
6.0-	7.0	5	1670	0.3	6.0-	7.0	786	1670	47.1	6.0-	7.0	40	1670	2.4
7.0-	8.0	2	1077	0.2	7.0-	8.0	474	1077	44.0	7.0-	8.0	20	1077	1.9
8.0-	10.0	1	927	0.1	8.0-	10.0	337	927	36.4	8.0-	10.0	27	927	2.9
10.0-	12.0	1	501	0.2	10.0-	12.0	130	501	25.9	10.0-	12.0	13	501	2.6
12.0-	13.0	1	122	0.8	12.0-	13.0	24	122	19.7	12.0-	13.0	8	122	6.6
13.0-	14.0	0	109	0.0	13.0-	14.0	19	109	17.4	13.0-	14.0	6	109	5.5
14.0-	15.0	0	7	0.0	14.0-	16.0	2	7	28.6	14.0-	15.0	1	7	14.3
16.0-	18.0	0	0	*****	16.0-	18.0	0	0	*****	16.0-	18.0	0	0	*****
18.0-	20.0	0	0	*****	18.0-	20.0	0	0	*****	18.0-	20.0	0	0	*****
20.0-	25.0	0	6	0.0	20.0-	25.0	0	6	0.0	20.0-	25.0	0	6	0.0
25.0-	30.0	0	0	*****	25.0-	30.0	0	0	*****	25.0-	30.0	0	0	*****
		137					4129					323		

SEP 22, 1953 WOOD FRAME HIROSHIMA GROUPS PERCENT INJURY-- MECH SEVERE RAD SEVERE BURNS

LIGHT MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	4	93	4.3
1.0- 1.5	13	184	7.1
1.5- 2.0	9	125	7.2
2.0- 2.5	16	221	7.2
2.5- 3.0	7	208	3.4
3.0- 3.5	13	552	2.4
3.5- 4.0	12	738	1.6
4.0- 4.5	8	820	1.0
4.5- 5.0	13	857	1.5
5.0- 5.5	1	962	0.1
5.5- 6.0	1	878	0.1
6.0- 7.0	5	1670	0.3
7.0- 8.0	1	1077	0.1
8.0- 10.0	1	927	0.1
10.0- 12.0	3	501	0.6
12.0- 13.0	1	122	0.8
13.0- 14.0	1	109	0.9
14.0- 16.0	1	7	14.3
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	110		

MOD MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	14	93	15.1
1.0- 1.5	51	184	27.7
1.5- 2.0	42	125	33.6
2.0- 2.5	81	221	36.7
2.5- 3.0	81	208	38.9
3.0- 3.5	196	552	35.5
3.5- 4.0	265	738	35.9
4.0- 4.5	353	820	43.0
4.5- 5.0	336	857	39.2
5.0- 5.5	413	962	42.9
5.5- 6.0	434	878	49.4
6.0- 7.0	747	1670	44.7
7.0- 8.0	436	1077	40.5
8.0- 10.0	351	927	37.9
10.0- 12.0	163	501	32.5
12.0- 13.0	34	122	27.9
13.0- 14.0	37	109	33.9
14.0- 16.0	3	7	42.9
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	3	6	50.0
25.0- 30.0	0	0	*****
	4040		

SEVERE MECH

PSI	CASES	TOTAL	PERCENT
0.5- 1.0	0	93	0.0
1.0- 1.5	3	184	1.6
1.5- 2.0	2	125	1.6
2.0- 2.5	17	221	7.7
2.5- 3.0	18	208	8.7
3.0- 3.5	47	552	8.5
3.5- 4.0	18	738	2.4
4.0- 4.5	33	820	4.0
4.5- 5.0	23	857	2.7
5.0- 5.5	29	962	3.0
5.5- 6.0	12	878	1.4
6.0- 7.0	44	1670	2.6
7.0- 8.0	23	1077	2.1
8.0- 10.0	30	927	3.2
10.0- 12.0	30	501	6.0
12.0- 13.0	10	122	8.2
13.0- 14.0	6	109	5.5
14.0- 16.0	2	7	28.6
16.0- 18.0	0	0	*****
18.0- 20.0	0	0	*****
20.0- 25.0	0	6	0.0
25.0- 30.0	0	0	*****
	347		

HIROSHIMA **SUMMARY** OUTSIDE UNSH

SEP 13, 1983 TOTAL REC: 18490 TOT UNINJURED: 171

I N J U R E D

RD	BN	NONE	MECHANICAL MN	MD	SV	TOTAL
N	N	*****	5	45	8	58
N	MN	4	1	1	0	6
N	MD	651	5	91	3	750
N	SV	567	12	49	5	655
N	TL	1264	23	186	16	1469
MN	N	6	0	4	1	11
MN	MN	0	0	0	0	0
MN	MD	33	1	5	1	40
MN	SV	40	1	1	2	44
MN	TL	79	2	10	4	95
MD	N	13	0	9	1	23
MD	MN	0	0	1	0	1
MD	MD	181	0	34	1	216
MD	SV	97	3	15	1	116
MD	TL	291	3	59	3	356
SV	N	6	0	9	0	15
SV	MN	0	0	1	0	1
SV	MD	62	0	26	2	90
SV	SV	33	1	13	0	47
SV	TL	101	1	49	2	153

BURNS	ALL RADIATION MECHANICAL			
N	25	5	67	10	107
MN	4	1	3	0	8
MD	927	6	156	7	1096
SV	759	17	78	8	862
TL	1715	29	304	25	2073

RAD	ALL BURNS MECHANICAL			
N	1264	23	186	16	1469
MN	79	2	10	4	95
MD	291	3	59	3	356
SV	101	1	49	2	153
TL	1715	29	304	25	2073

RAD	ALL MECHANICAL BURNS			
N	58	6	750	655	1469
MN	11	0	40	44	95
MD	23	1	216	116	356
SV	15	1	90	47	153
TL	107	8	1096	862	2073

MORTALLY INJURED

RD	BN	NONE	MECHANICAL MN	MD	SV	TOTAL
N	N	*****	0	0	0	0
N	MN	0	0	0	0	0
N	MD	36	0	5	0	41
N	SV	45	0	4	0	49
N	TL	81	0	9	0	90
MN	N	0	0	0	0	0
MN	MN	0	0	0	0	0
MN	MD	1	0	0	0	1
MN	SV	0	0	0	0	0
MN	TL	1	0	0	0	1
MD	N	0	0	1	0	1
MD	MN	0	0	0	0	0
MD	MD	3	0	0	0	3
MD	SV	0	0	0	0	0
MD	TL	3	0	1	0	4
SV	N	0	0	0	0	0
SV	MN	1	0	0	0	1
SV	MD	3	0	0	0	3
SV	SV	3	0	0	0	3
SV	TL	7	0	0	0	7

BURNS	ALL RADIATION MECHANICAL			
N	0	0	1	0	1
MN	1	0	0	0	1
MD	43	0	5	0	48
SV	48	0	4	0	52
TL	92	0	10	0	102

RAD	ALL BURNS MECHANICAL			
N	81	0	9	0	90
MN	1	0	0	0	1
MD	3	0	1	0	4
SV	7	0	0	0	7
TL	92	0	10	0	102

RAD	ALL MECHANICAL BURNS			
N	0	0	41	49	90
MN	0	0	1	0	1
MD	1	0	3	0	4
SV	0	1	3	3	7
TL	1	1	48	52	102

KILLED IMMEDIATELY

RD	BN	NONE	MECHANICAL MN	MD	SV	TOTAL
N	N	*****	0	0	0	0
N	MN	0	0	0	0	0
N	MD	16	0	1	0	17
N	SV	11	0	1	0	12
N	TL	27	0	2	0	29
MN	N	0	0	0	0	0
MN	MN	0	0	0	0	0
MN	MD	0	0	0	0	0
MN	SV	0	0	0	0	0
MN	TL	0	0	0	0	0
MD	N	0	0	0	0	0
MD	MN	0	0	0	0	0
MD	MD	0	0	0	0	0
MD	SV	0	0	0	0	0
MD	TL	0	0	0	0	0
SV	N	0	0	1	0	1
SV	MN	0	0	0	0	0
SV	MD	0	0	0	0	0
SV	SV	0	0	0	0	0
SV	TL	0	0	1	0	1

BURNS	ALL RADIATION MECHANICAL			
N	0	0	1	0	1
MN	0	0	0	0	0
MD	16	0	1	0	17
SV	11	0	1	0	12
TL	27	0	3	0	30

RAD	ALL BURNS MECHANICAL			
N	27	0	2	0	29
MN	0	0	0	0	0
MD	0	0	0	0	0
SV	0	0	1	0	1
TL	27	0	3	0	30

RAD	ALL MECHANICAL BURNS			
N	0	0	17	12	29
MN	0	0	0	0	0
MD	0	0	0	0	0
SV	1	0	0	0	1
TL	1	0	17	12	30

SEP 22, 1983 OUTSIDE UNSH HIROSHIMA GROUPS PERCENT INJURY-- BURNS NO MECH NO RAD

CAL	LIGHT BURNS CASES	LIGHT BURNS TOTAL	LIGHT BURNS PERCENT	MOD BURNS CASES	MOD BURNS TOTAL	MOD BURNS PERCENT	SEVERE BURNS CASES	SEVERE BURNS TOTAL	SEVERE BURNS PERCENT
0.5- 1.0	0	11	0.0	0	11	0.0	0	11	0.0
1.0- 1.5	0	41	0.0	2	41	4.9	0	41	0.0
1.5- 2.0	1	47	2.1	7	47	14.9	0	47	0.0
2.0- 2.5	0	19	0.0	7	19	36.8	1	19	5.3
2.5- 3.0	0	16	0.0	4	16	25.0	3	16	18.8
3.0- 3.5	0	19	0.0	6	19	31.6	5	19	26.3
3.5- 4.0	0	40	0.0	14	40	35.0	15	40	37.5
4.0- 4.5	1	45	2.2	18	45	40.0	15	45	33.3
4.5- 5.0	0	34	0.0	8	34	23.5	20	34	58.8
5.0- 5.5	0	149	0.0	33	149	22.1	90	149	60.4
5.5- 6.0	0	99	0.0	25	99	25.3	60	99	60.6
6.0- 7.0	0	66	0.0	19	66	28.8	36	66	54.5
7.0- 8.0	0	124	0.0	41	124	33.1	44	124	35.5
8.0- 10.0	1	442	0.2	129	442	29.2	144	442	32.6
10.0- 12.0	1	468	0.2	214	468	45.7	67	468	14.3
12.0- 14.0	0	154	0.0	43	154	27.9	31	154	20.1
14.0- 16.0	0	109	0.0	30	109	27.5	26	109	23.9
16.0- 18.0	0	62	0.0	13	62	21.0	10	62	16.1
18.0- 20.0	0	73	0.0	14	73	19.2	7	73	9.6
20.0- 25.0	0	115	0.0	11	115	9.6	5	115	4.3
25.0- 30.0	0	69	0.0	10	69	14.5	7	69	10.1
30.0- 40.0	0	28	0.0	2	28	7.1	2	28	7.1
40.0- 50.0	0	6	0.0	1	6	16.7	0	6	0.0
50.0- 60.0	0	3	0.0	0	3	0.0	1	3	33.3
60.0- 80.0	0	1	0.0	0	1	0.0	0	1	0.0
80.0-100.0	0	2	0.0	0	2	0.0	0	2	0.0
100.0-125.0	0	0	*****	0	0	*****	0	0	*****
	4			651			589		

SEP 22, 1983 OUTSIDE UNSH HIROSHIMA GROUPS PERCENT INJURY-- BURNS LIGHT MECH NO RAD

LIGHT BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0
1.5- 2.0	1	47	2.1
2.0- 2.5	0	19	0.0
2.5- 3.0	0	16	0.0
3.0- 3.5	0	19	0.0
3.5- 4.0	0	40	0.0
4.0- 4.5	1	45	2.2
4.5- 5.0	0	34	0.0
5.0- 5.5	0	149	0.0
5.5- 6.0	0	99	0.0
6.0- 7.0	0	66	0.0
7.0- 8.0	0	124	0.0
8.0- 10.0	1	442	0.2
10.0- 12.0	1	468	0.2
12.0- 14.0	0	154	0.0
14.0- 16.0	0	109	0.0
16.0- 18.0	0	62	0.0
18.0- 20.0	0	73	0.0
20.0- 25.0	0	115	0.0
25.0- 30.0	1	69	1.4
30.0- 40.0	0	28	0.0
40.0- 50.0	0	6	0.0
50.0- 60.0	0	3	0.0
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	5		

MOD BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	2	41	4.9
1.5- 2.0	7	47	14.9
2.0- 2.5	7	19	36.8
2.5- 3.0	4	16	25.0
3.0- 3.5	6	19	31.6
3.5- 4.0	14	40	35.0
4.0- 4.5	18	45	40.0
4.5- 5.0	8	34	23.5
5.0- 5.5	34	149	22.8
5.5- 6.0	26	99	26.3
6.0- 7.0	19	66	28.8
7.0- 8.0	41	124	33.1
8.0- 10.0	131	442	29.6
10.0- 12.0	214	468	45.7
12.0- 14.0	43	154	27.9
14.0- 16.0	30	109	27.5
16.0- 18.0	13	62	21.0
18.0- 20.0	15	73	20.5
20.0- 25.0	11	115	9.6
25.0- 30.0	10	69	14.5
30.0- 40.0	2	28	7.1
40.0- 50.0	1	6	16.7
50.0- 60.0	0	3	0.0
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	656		

SEVERE BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0
1.5- 2.0	0	47	0.0
2.0- 2.5	1	19	5.3
2.5- 3.0	3	16	18.8
3.0- 3.5	5	19	26.3
3.5- 4.0	15	40	37.5
4.0- 4.5	15	45	33.3
4.5- 5.0	20	34	58.8
5.0- 5.5	93	149	62.4
5.5- 6.0	63	99	63.6
6.0- 7.0	36	66	54.5
7.0- 8.0	45	124	36.3
8.0- 10.0	148	442	33.5
10.0- 12.0	68	468	14.5
12.0- 14.0	31	154	20.1
14.0- 16.0	26	109	23.9
16.0- 18.0	10	62	16.1
18.0- 20.0	7	73	9.6
20.0- 25.0	5	115	4.3
25.0- 30.0	7	69	10.1
30.0- 40.0	2	28	7.1
40.0- 50.0	0	6	0.0
50.0- 60.0	1	3	33.3
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	601		

SEP 22, 1983 OUTSIDE UNSH HIROSHIMA GROUPS PERCENT INJURY-- BURNS MOD MECH NO RAD

LIGHT BURNS CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0
1.5- 2.0	1	47	2.1
2.0- 2.5	0	19	0.0
2.5- 3.0	0	16	0.0
3.0- 3.5	0	19	0.0
3.5- 4.0	0	40	0.0
4.0- 4.5	1	45	2.2
4.5- 5.0	0	34	0.0
5.0- 5.5	0	149	0.0
5.5- 6.0	0	99	0.0
6.0- 7.0	0	66	0.0
7.0- 8.0	0	124	0.0
8.0- 10.0	1	442	0.2
10.0- 12.0	2	468	0.4
12.0- 14.0	0	154	0.0
14.0- 16.0	0	109	0.0
16.0- 18.0	0	62	0.0
18.0- 20.0	0	73	0.0
20.0- 25.0	0	115	0.0
25.0- 30.0	0	69	0.0
30.0- 40.0	0	28	0.0
40.0- 50.0	0	6	0.0
50.0- 60.0	0	3	0.0
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	5		

MOD BURNS CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	2	41	4.9
1.5- 2.0	7	47	14.9
2.0- 2.5	7	19	36.8
2.5- 3.0	4	16	25.0
3.0- 3.5	6	19	31.6
3.5- 4.0	15	40	37.5
4.0- 4.5	18	45	40.0
4.5- 5.0	11	34	32.4
5.0- 5.5	39	149	26.2
5.5- 6.0	29	99	29.3
6.0- 7.0	19	66	28.8
7.0- 8.0	48	124	38.7
8.0- 10.0	145	442	32.8
10.0- 12.0	236	468	50.4
12.0- 14.0	60	154	39.0
14.0- 16.0	35	109	32.1
16.0- 18.0	17	62	27.4
18.0- 20.0	16	73	21.9
20.0- 25.0	13	115	11.3
25.0- 30.0	11	69	15.9
30.0- 40.0	3	28	10.7
40.0- 50.0	1	6	16.7
50.0- 60.0	0	3	0.0
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	742		

SEVERE BURNS CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0
1.5- 2.0	0	47	0.0
2.0- 2.5	1	19	5.3
2.5- 3.0	3	16	18.8
3.0- 3.5	7	19	36.8
3.5- 4.0	16	40	40.0
4.0- 4.5	17	45	37.8
4.5- 5.0	22	34	64.7
5.0- 5.5	100	149	67.1
5.5- 6.0	64	99	64.6
6.0- 7.0	38	66	57.6
7.0- 8.0	44	124	35.5
8.0- 10.0	156	442	35.3
10.0- 12.0	71	468	15.2
12.0- 14.0	34	154	22.1
14.0- 16.0	29	109	26.6
16.0- 18.0	10	62	16.1
18.0- 20.0	8	73	11.0
20.0- 25.0	5	115	4.3
25.0- 30.0	8	69	11.6
30.0- 40.0	3	28	10.7
40.0- 50.0	0	6	0.0
50.0- 60.0	1	3	33.3
60.0- 80.0	0	1	0.0
80.0-100.0	1	2	50.0
100.0-125.0	0	0	*****
	638		

SEP 22, 1983 OUTSIDE UNSH HIROSHIMA GROUPS PERCENT INJURY-- BURNS SEVERE MECH NO RAD

CAL	LIGHT BURNS CASES	TOTAL	PERCENT	CAL	MOD BURNS CASES	TOTAL	PERCENT	CAL	SEVERE BURNS CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0	0.5- 1.0	0	11	0.0	0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0	1.0- 1.5	2	41	4.9	1.0- 1.5	0	41	0.0
1.5- 2.0	1	47	2.1	1.5- 2.0	7	47	14.9	1.5- 2.0	0	47	0.0
2.0- 2.5	0	19	0.0	2.0- 2.5	7	19	36.8	2.0- 2.5	1	19	5.3
2.5- 3.0	0	16	0.0	2.5- 3.0	4	16	25.0	2.5- 3.0	3	16	18.8
3.0- 3.5	0	19	0.0	3.0- 3.5	6	19	31.6	3.0- 3.5	5	19	26.3
3.5- 4.0	0	40	0.0	3.5- 4.0	14	40	35.0	3.5- 4.0	15	40	37.5
4.0- 4.5	1	45	2.2	4.0- 4.5	19	45	42.2	4.0- 4.5	15	45	33.3
4.5- 5.0	0	34	0.0	4.5- 5.0	8	34	23.5	4.5- 5.0	20	34	58.8
5.0- 5.5	0	149	0.0	5.0- 5.5	34	149	22.8	5.0- 5.5	91	149	61.1
5.5- 6.0	0	99	0.0	5.5- 6.0	25	99	25.3	5.5- 6.0	60	99	60.6
6.0- 7.0	0	66	0.0	6.0- 7.0	19	66	28.8	6.0- 7.0	36	66	54.5
7.0- 8.0	0	124	0.0	7.0- 8.0	41	124	33.1	7.0- 8.0	45	124	36.3
8.0- 10.0	1	442	0.2	8.0- 10.0	129	442	29.2	8.0- 10.0	146	442	33.0
10.0- 12.0	1	468	0.2	10.0- 12.0	215	468	45.9	10.0- 12.0	67	468	14.3
12.0- 14.0	0	154	0.0	12.0- 14.0	43	154	27.9	12.0- 14.0	32	154	20.8
14.0- 16.0	0	109	0.0	14.0- 16.0	30	109	27.5	14.0- 16.0	26	109	23.9
16.0- 18.0	0	62	0.0	16.0- 18.0	13	62	21.0	16.0- 18.0	10	62	16.1
18.0- 20.0	0	73	0.0	18.0- 20.0	14	73	19.2	18.0- 20.0	7	73	9.6
20.0- 25.0	0	115	0.0	20.0- 25.0	11	115	9.6	20.0- 25.0	5	115	4.3
25.0- 30.0	0	69	0.0	25.0- 30.0	10	69	14.5	25.0- 30.0	7	69	10.1
30.0- 40.0	0	28	0.0	30.0- 40.0	2	28	7.1	30.0- 40.0	2	28	7.1
40.0- 50.0	0	6	0.0	40.0- 50.0	1	6	16.7	40.0- 50.0	0	6	0.0
50.0- 60.0	0	3	0.0	50.0- 60.0	0	3	0.0	50.0- 60.0	1	3	33.3
60.0- 80.0	0	1	0.0	60.0- 80.0	0	1	0.0	60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0	80.0-100.0	0	2	0.0	80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****	100.0-125.0	0	0	*****	100.0-125.0	0	0	*****
	4				654				594		

SEP 22, 1983 OUTSIDE UNSH HIROSHIMA GROUPS PERCENT INJURY-- BURNS NO MECH LIGHT RAD

CAL	LIGHT BURNS CASES	LIGHT BURNS TOTAL	LIGHT BURNS PERCENT	MOD BURNS CASES	MOD BURNS TOTAL	MOD BURNS PERCENT	SEVERE BURNS CASES	SEVERE BURNS TOTAL	SEVERE BURNS PERCENT
0.5- 1.0	0	11	0.0	0	11	0.0	0	11	0.0
1.0- 1.5	0	41	0.0	2	41	4.9	0	41	0.0
1.5- 2.0	1	47	2.1	7	47	14.9	0	47	0.0
2.0- 2.5	0	19	0.0	7	19	36.8	1	19	5.3
2.5- 3.0	0	16	0.0	4	16	25.0	3	16	18.8
3.0- 3.5	0	19	0.0	6	19	31.6	5	19	26.3
3.5- 4.0	0	40	0.0	14	40	35.0	15	40	37.5
4.0- 4.5	1	45	2.2	18	45	40.0	15	45	33.3
4.5- 5.0	0	34	0.0	8	34	23.5	20	34	58.8
5.0- 5.5	0	149	0.0	33	149	22.1	90	149	60.4
5.5- 6.0	0	99	0.0	25	99	25.3	60	99	60.6
6.0- 7.0	0	66	0.0	19	66	28.8	36	66	54.5
7.0- 8.0	0	124	0.0	41	124	33.1	44	124	35.5
8.0- 10.0	1	442	0.2	141	442	31.9	168	442	38.0
10.0- 12.0	1	468	0.2	225	468	48.1	70	468	15.0
12.0- 14.0	0	154	0.0	46	154	29.9	35	154	22.7
14.0- 16.0	0	109	0.0	32	109	29.4	28	109	25.7
16.0- 18.0	0	62	0.0	14	62	22.6	10	62	16.1
18.0- 20.0	0	73	0.0	15	73	20.5	11	73	15.1
20.0- 25.0	0	115	0.0	13	115	11.3	6	115	5.2
25.0- 30.0	0	69	0.0	11	69	15.9	8	69	11.6
30.0- 40.0	0	28	0.0	2	28	7.1	3	28	10.7
40.0- 50.0	0	6	0.0	1	6	16.7	0	6	0.0
50.0- 60.0	0	3	0.0	0	3	0.0	1	3	33.3
60.0- 80.0	0	1	0.0	0	1	0.0	0	1	0.0
80.0-100.0	0	2	0.0	0	2	0.0	0	2	0.0
100.0-125.0	0	0	*****	0	0	*****	0	0	*****
	4			684			629		

SEP 22, 1983 OUTSIDE UNSH HIROSHIMA GROUPS PERCENT INJURY-- BURNS LIGHT MECH LIGHT RAD

LIGHT BURNS CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0
1.5- 2.0	1	47	2.1
2.0- 2.5	0	19	0.0
2.5- 3.0	0	16	0.0
3.0- 3.5	0	19	0.0
3.5- 4.0	0	40	0.0
4.0- 4.5	1	45	2.2
4.5- 5.0	0	34	0.0
5.0- 5.5	0	149	0.0
5.5- 6.0	0	99	0.0
6.0- 7.0	0	66	0.0
7.0- 8.0	0	124	0.0
8.0- 10.0	1	442	0.2
10.0- 12.0	1	468	0.2
12.0- 14.0	0	154	0.0
14.0- 16.0	0	109	0.0
16.0- 18.0	0	62	0.0
18.0- 20.0	0	73	0.0
20.0- 25.0	0	115	0.0
25.0- 30.0	1	69	1.4
30.0- 40.0	0	28	0.0
40.0- 50.0	0	6	0.0
50.0- 60.0	0	3	0.0
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	5		

MOD BURNS CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	2	41	4.9
1.5- 2.0	7	47	14.9
2.0- 2.5	7	19	36.8
2.5- 3.0	4	16	25.0
3.0- 3.5	6	19	31.6
3.5- 4.0	14	40	35.0
4.0- 4.5	18	45	40.0
4.5- 5.0	8	34	23.5
5.0- 5.5	34	149	22.8
5.5- 6.0	26	99	26.3
6.0- 7.0	19	66	28.8
7.0- 8.0	41	124	33.1
8.0- 10.0	144	442	32.6
10.0- 12.0	225	468	48.1
12.0- 14.0	46	154	29.9
14.0- 16.0	32	109	29.4
16.0- 18.0	14	62	22.6
18.0- 20.0	16	73	21.9
20.0- 25.0	13	115	11.3
25.0- 30.0	11	69	15.9
30.0- 40.0	2	28	7.1
40.0- 50.0	1	6	16.7
50.0- 60.0	0	3	0.0
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	690		

SEVERE BURNS CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0
1.5- 2.0	0	47	0.0
2.0- 2.5	1	19	5.3
2.5- 3.0	3	16	18.8
3.0- 3.5	5	19	26.3
3.5- 4.0	15	40	37.5
4.0- 4.5	15	45	33.3
4.5- 5.0	20	34	58.8
5.0- 5.5	93	149	62.4
5.5- 6.0	63	99	63.6
6.0- 7.0	37	66	56.1
7.0- 8.0	45	124	36.3
8.0- 10.0	172	442	38.9
10.0- 12.0	71	468	15.2
12.0- 14.0	35	154	22.7
14.0- 16.0	28	109	25.7
16.0- 18.0	10	62	16.1
18.0- 20.0	11	73	15.1
20.0- 25.0	6	115	5.2
25.0- 30.0	8	69	11.6
30.0- 40.0	3	28	10.7
40.0- 50.0	0	6	0.0
50.0- 60.0	1	3	33.3
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	642		

SEP 22, 1983 OUTSIDE UNSH HIROSHIMA GROUPS PERCENT INJURY-- BURNS MOD MECH LIGHT RAD

LIGHT BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0
1.5- 2.0	1	47	2.1
2.0- 2.5	0	19	0.0
2.5- 3.0	0	16	0.0
3.0- 3.5	0	19	0.0
3.5- 4.0	0	40	0.0
4.0- 4.5	1	45	2.2
4.5- 5.0	0	34	0.0
5.0- 5.5	0	149	0.0
5.5- 6.0	0	99	0.0
6.0- 7.0	0	66	0.0
7.0- 8.0	0	124	0.0
8.0- 10.0	1	442	0.2
10.0- 12.0	2	468	0.4
12.0- 14.0	0	154	0.0
14.0- 16.0	0	109	0.0
16.0- 18.0	0	62	0.0
18.0- 20.0	0	73	0.0
20.0- 25.0	0	115	0.0
25.0- 30.0	0	69	0.0
30.0- 40.0	0	28	0.0
40.0- 50.0	0	6	0.0
50.0- 60.0	0	3	0.0
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	5		

MOD BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	2	41	4.9
1.5- 2.0	7	47	14.9
2.0- 2.5	7	19	36.8
2.5- 3.0	4	16	25.0
3.0- 3.5	6	19	31.6
3.5- 4.0	15	40	37.5
4.0- 4.5	18	45	40.0
4.5- 5.0	11	34	32.4
5.0- 5.5	39	149	26.2
5.5- 6.0	29	99	29.3
6.0- 7.0	19	66	28.8
7.0- 8.0	49	124	39.5
8.0- 10.0	159	442	36.0
10.0- 12.0	247	468	52.8
12.0- 14.0	63	154	40.9
14.0- 16.0	37	109	33.9
16.0- 18.0	18	62	29.0
18.0- 20.0	18	73	24.7
20.0- 25.0	16	115	13.9
25.0- 30.0	12	69	17.4
30.0- 40.0	3	28	10.7
40.0- 50.0	1	6	16.7
50.0- 60.0	0	3	0.0
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	780		

SEVERE BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0
1.5- 2.0	0	47	0.0
2.0- 2.5	1	19	5.3
2.5- 3.0	3	16	18.8
3.0- 3.5	7	19	36.8
3.5- 4.0	16	40	40.0
4.0- 4.5	17	45	37.8
4.5- 5.0	22	34	64.7
5.0- 5.5	100	149	67.1
5.5- 6.0	64	99	64.6
6.0- 7.0	38	66	57.6
7.0- 8.0	44	124	35.5
8.0- 10.0	181	442	41.0
10.0- 12.0	74	468	15.8
12.0- 14.0	38	154	24.7
14.0- 16.0	31	109	28.4
16.0- 18.0	10	62	16.1
18.0- 20.0	12	73	16.4
20.0- 25.0	6	115	5.2
25.0- 30.0	9	69	13.0
30.0- 40.0	4	28	14.3
40.0- 50.0	0	6	0.0
50.0- 60.0	1	3	33.3
60.0- 80.0	0	1	0.0
80.0-100.0	1	2	50.0
100.0-125.0	0	0	*****
	679		

SEP 22, 1983 OUTSIDE UNSH HIROSHIMA GROUPS PERCENT INJURY-- BURNS SEVERE MECH LIGHT RAD

LIGHT BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0
1.5- 2.0	1	47	2.1
2.0- 2.5	0	19	0.0
2.5- 3.0	0	16	0.0
3.0- 3.5	0	19	0.0
3.5- 4.0	0	40	0.0
4.0- 4.5	1	45	2.2
4.5- 5.0	0	34	0.0
5.0- 5.5	0	149	0.0
5.5- 6.0	0	99	0.0
6.0- 7.0	0	66	0.0
7.0- 8.0	0	124	0.0
8.0- 10.0	1	442	0.2
10.0- 12.0	1	468	0.2
12.0- 14.0	0	154	0.0
14.0- 16.0	0	109	0.0
16.0- 18.0	0	62	0.0
18.0- 20.0	0	73	0.0
20.0- 25.0	0	115	0.0
25.0- 30.0	0	69	0.0
30.0- 40.0	0	28	0.0
40.0- 50.0	0	6	0.0
50.0- 60.0	0	3	0.0
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	4		

MOD BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	2	41	4.9
1.5- 2.0	7	47	14.9
2.0- 2.5	7	19	36.8
2.5- 3.0	4	16	25.0
3.0- 3.5	6	19	31.6
3.5- 4.0	14	40	35.0
4.0- 4.5	19	45	42.2
4.5- 5.0	8	34	23.5
5.0- 5.5	34	149	22.8
5.5- 6.0	25	99	25.3
6.0- 7.0	19	66	28.8
7.0- 8.0	41	124	33.1
8.0- 10.0	142	442	32.1
10.0- 12.0	226	468	48.3
12.0- 14.0	46	154	29.9
14.0- 16.0	32	109	29.4
16.0- 18.0	14	62	22.6
18.0- 20.0	15	73	20.5
20.0- 25.0	13	115	11.3
25.0- 30.0	11	69	15.9
30.0- 40.0	2	28	7.1
40.0- 50.0	1	6	16.7
50.0- 60.0	0	3	0.0
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	688		

SEVERE BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0
1.5- 2.0	0	47	0.0
2.0- 2.5	1	19	5.3
2.5- 3.0	3	16	18.8
3.0- 3.5	5	19	26.3
3.5- 4.0	15	40	37.5
4.0- 4.5	15	45	33.3
4.5- 5.0	20	34	58.8
5.0- 5.5	91	149	61.1
5.5- 6.0	60	99	60.6
6.0- 7.0	36	66	54.5
7.0- 8.0	46	124	37.1
8.0- 10.0	170	442	38.5
10.0- 12.0	70	468	15.0
12.0- 14.0	36	154	23.4
14.0- 16.0	29	109	26.6
16.0- 18.0	10	62	16.1
18.0- 20.0	11	73	15.1
20.0- 25.0	6	115	5.2
25.0- 30.0	8	69	11.6
30.0- 40.0	3	28	10.7
40.0- 50.0	0	6	0.0
50.0- 60.0	1	3	33.3
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	636		

SEP 22, 1983 OUTSIDE UNSH HIROSHIMA GROUPS PERCENT INJURY-- BURNS NO MECH MOD RAD

LIGHT BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0
1.5- 2.0	1	47	2.1
2.0- 2.5	0	19	0.0
2.5- 3.0	0	16	0.0
3.0- 3.5	0	19	0.0
3.5- 4.0	0	40	0.0
4.0- 4.5	1	45	2.2
4.5- 5.0	0	34	0.0
5.0- 5.5	0	149	0.0
5.5- 6.0	0	99	0.0
6.0- 7.0	0	66	0.0
7.0- 8.0	0	124	0.0
8.0- 10.0	1	442	0.2
10.0- 12.0	1	468	0.2
12.0- 14.0	0	154	0.0
14.0- 16.0	0	109	0.0
16.0- 18.0	0	62	0.0
18.0- 20.0	0	73	0.0
20.0- 25.0	0	115	0.0
25.0- 30.0	0	69	0.0
30.0- 40.0	0	28	0.0
40.0- 50.0	0	6	0.0
50.0- 60.0	0	3	0.0
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	4		

MOD BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	2	41	4.9
1.5- 2.0	7	47	14.9
2.0- 2.5	7	19	36.8
2.5- 3.0	4	16	25.0
3.0- 3.5	6	19	31.6
3.5- 4.0	14	40	35.0
4.0- 4.5	18	45	40.0
4.5- 5.0	8	34	23.5
5.0- 5.5	33	149	22.1
5.5- 6.0	25	99	25.3
6.0- 7.0	19	66	28.8
7.0- 8.0	47	124	37.9
8.0- 10.0	152	442	34.4
10.0- 12.0	284	468	60.7
12.0- 14.0	58	154	37.7
14.0- 16.0	38	109	34.9
16.0- 18.0	25	62	40.3
18.0- 20.0	23	73	31.5
20.0- 25.0	39	115	33.9
25.0- 30.0	18	69	26.1
30.0- 40.0	4	28	14.3
40.0- 50.0	1	6	16.7
50.0- 60.0	0	3	0.0
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	832		

SEVERE BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0
1.5- 2.0	0	47	0.0
2.0- 2.5	1	19	5.3
2.5- 3.0	3	16	18.8
3.0- 3.5	5	19	26.3
3.5- 4.0	15	40	37.5
4.0- 4.5	15	45	33.3
4.5- 5.0	20	34	58.8
5.0- 5.5	90	149	60.4
5.5- 6.0	60	99	60.6
6.0- 7.0	37	66	56.1
7.0- 8.0	49	124	39.5
8.0- 10.0	174	442	39.4
10.0- 12.0	86	468	18.4
12.0- 14.0	42	154	27.3
14.0- 16.0	30	109	27.5
16.0- 18.0	13	62	21.0
18.0- 20.0	14	73	19.2
20.0- 25.0	14	115	12.2
25.0- 30.0	11	69	15.9
30.0- 40.0	5	28	17.9
40.0- 50.0	0	6	0.0
50.0- 60.0	2	3	66.7
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	686		

SEP 22, 1983 OUTSIDE UNSH HIROSHIMA GROUPS PERCENT INJURY-- BURNS LIGHT MECH MOD RAD

LIGHT BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0
1.5- 2.0	1	47	2.1
2.0- 2.5	0	19	0.0
2.5- 3.0	0	16	0.0
3.0- 3.5	0	19	0.0
3.5- 4.0	0	40	0.0
4.0- 4.5	1	45	2.2
4.5- 5.0	0	34	0.0
5.0- 5.5	0	149	0.0
5.5- 6.0	0	99	0.0
6.0- 7.0	0	66	0.0
7.0- 8.0	0	124	0.0
8.0- 10.0	1	442	0.2
10.0- 12.0	1	468	0.2
12.0- 14.0	0	154	0.0
14.0- 16.0	0	109	0.0
16.0- 18.0	0	62	0.0
18.0- 20.0	0	73	0.0
20.0- 25.0	0	115	0.0
25.0- 30.0	1	69	1.4
30.0- 40.0	0	28	0.0
40.0- 50.0	0	6	0.0
50.0- 60.0	0	3	0.0
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	5		

MOD BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	2	41	4.9
1.5- 2.0	7	47	14.9
2.0- 2.5	7	19	36.8
2.5- 3.0	4	16	25.0
3.0- 3.5	6	19	31.6
3.5- 4.0	14	40	35.0
4.0- 4.5	18	45	40.0
4.5- 5.0	8	34	23.5
5.0- 5.5	34	149	22.8
5.5- 6.0	26	99	26.3
6.0- 7.0	19	66	28.8
7.0- 8.0	47	124	37.9
8.0- 10.0	154	442	34.8
10.0- 12.0	284	468	60.7
12.0- 14.0	58	154	37.7
14.0- 16.0	38	109	34.9
16.0- 18.0	25	62	40.3
18.0- 20.0	24	73	32.9
20.0- 25.0	39	115	33.9
25.0- 30.0	18	69	26.1
30.0- 40.0	4	28	14.3
40.0- 50.0	1	6	16.7
50.0- 60.0	0	3	0.0
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	837		

SEVERE BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0
1.5- 2.0	0	47	0.0
2.0- 2.5	1	19	5.3
2.5- 3.0	3	16	18.8
3.0- 3.5	5	19	26.3
3.5- 4.0	15	40	37.5
4.0- 4.5	15	45	33.3
4.5- 5.0	20	34	58.8
5.0- 5.5	93	149	62.4
5.5- 6.0	63	99	63.6
6.0- 7.0	37	66	56.1
7.0- 8.0	50	124	40.3
8.0- 10.0	178	442	40.3
10.0- 12.0	88	468	18.8
12.0- 14.0	42	154	27.3
14.0- 16.0	31	109	28.4
16.0- 18.0	13	62	21.0
18.0- 20.0	15	73	20.5
20.0- 25.0	14	115	12.2
25.0- 30.0	11	69	15.9
30.0- 40.0	5	28	17.9
40.0- 50.0	0	6	0.0
50.0- 60.0	2	3	66.7
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	701		

SEP 22, 1983 OUTSIDE UNSH HIROSHIMA GROUPS PERCENT INJURY-- BURNS MOD MECH MOD RAD

CAL	LIGHT BURNS CASES	TOTAL	PERCENT	MOD BURNS CASES	TOTAL	PERCENT	SEVERE BURNS CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0	0	11	0.0	0	11	0.0
1.0- 1.5	0	41	0.0	2	41	4.9	0	41	0.0
1.5- 2.0	1	47	2.1	7	47	14.9	0	47	0.0
2.0- 2.5	0	19	0.0	7	19	36.8	1	19	5.3
2.5- 3.0	0	16	0.0	4	16	25.0	3	16	18.8
3.0- 3.5	0	19	0.0	6	19	31.6	7	19	36.8
3.5- 4.0	0	40	0.0	15	40	37.5	16	40	40.0
4.0- 4.5	1	45	2.2	18	45	40.0	17	45	37.8
4.5- 5.0	0	34	0.0	11	34	32.4	22	34	64.7
5.0- 5.5	0	149	0.0	39	149	26.2	100	149	67.1
5.5- 6.0	0	99	0.0	29	99	29.3	64	99	64.6
6.0- 7.0	0	66	0.0	19	66	28.8	39	66	59.1
7.0- 8.0	0	124	0.0	54	124	43.5	49	124	39.5
8.0- 10.0	1	442	0.2	172	442	38.9	189	442	42.8
10.0- 12.0	3	468	0.6	316	468	67.5	92	468	19.7
12.0- 14.0	0	154	0.0	78	154	50.6	47	154	30.5
14.0- 16.0	0	109	0.0	45	109	41.3	34	109	31.2
16.0- 18.0	0	62	0.0	31	62	50.0	15	62	24.2
18.0- 20.0	0	73	0.0	27	73	37.0	15	73	20.5
20.0- 25.0	0	115	0.0	47	115	40.9	17	115	14.8
25.0- 30.0	0	69	0.0	21	69	30.4	13	69	18.8
30.0- 40.0	0	28	0.0	7	28	25.0	7	28	25.0
40.0- 50.0	0	6	0.0	1	6	16.7	0	6	0.0
50.0- 60.0	0	3	0.0	0	3	0.0	2	3	66.7
60.0- 80.0	0	1	0.0	0	1	0.0	0	1	0.0
80.0-100.0	0	2	0.0	1	2	50.0	1	2	50.0
100.0-125.0	0	0	*****	0	0	*****	0	0	*****
	6			957			750		

SEP 22, 1983 OUTSIDE UNSH HIROSHIMA GROUPS PERCENT INJURY-- BURNS SEVERE MECH MOD RAD

LIGHT BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0
1.5- 2.0	1	47	2.1
2.0- 2.5	0	19	0.0
2.5- 3.0	0	16	0.0
3.0- 3.5	0	19	0.0
3.5- 4.0	0	40	0.0
4.0- 4.5	1	45	2.2
4.5- 5.0	0	34	0.0
5.0- 5.5	0	149	0.0
5.5- 6.0	0	99	0.0
6.0- 7.0	0	66	0.0
7.0- 8.0	0	124	0.0
8.0- 10.0	1	442	0.2
10.0- 12.0	1	468	0.2
12.0- 14.0	0	154	0.0
14.0- 16.0	0	109	0.0
16.0- 18.0	0	62	0.0
18.0- 20.0	0	73	0.0
20.0- 25.0	0	115	0.0
25.0- 30.0	0	69	0.0
30.0- 40.0	0	28	0.0
40.0- 50.0	0	6	0.0
50.0- 60.0	0	3	0.0
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	4		

MOD BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	2	41	4.9
1.5- 2.0	7	47	14.9
2.0- 2.5	7	19	36.8
2.5- 3.0	4	16	25.0
3.0- 3.5	6	19	31.6
3.5- 4.0	14	40	35.0
4.0- 4.5	19	45	42.2
4.5- 5.0	8	34	23.5
5.0- 5.5	34	149	22.8
5.5- 6.0	25	99	25.3
6.0- 7.0	19	66	28.8
7.0- 8.0	47	124	37.9
8.0- 10.0	153	442	34.6
10.0- 12.0	285	468	60.9
12.0- 14.0	58	154	37.7
14.0- 16.0	38	109	34.9
16.0- 18.0	25	62	40.3
18.0- 20.0	23	73	31.5
20.0- 25.0	39	115	33.9
25.0- 30.0	18	69	26.1
30.0- 40.0	4	28	14.3
40.0- 50.0	1	6	16.7
50.0- 60.0	0	3	0.0
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	836		

SEVERE BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0
1.5- 2.0	0	47	0.0
2.0- 2.5	1	19	5.3
2.5- 3.0	3	16	18.8
3.0- 3.5	5	19	26.3
3.5- 4.0	15	40	37.5
4.0- 4.5	15	45	33.3
4.5- 5.0	20	34	58.8
5.0- 5.5	91	149	61.1
5.5- 6.0	60	99	60.6
6.0- 7.0	37	66	56.1
7.0- 8.0	50	124	40.3
8.0- 10.0	176	442	39.8
10.0- 12.0	86	468	18.4
12.0- 14.0	44	154	28.6
14.0- 16.0	30	109	27.5
16.0- 18.0	13	62	21.0
18.0- 20.0	14	73	19.2
20.0- 25.0	14	115	12.2
25.0- 30.0	11	69	15.9
30.0- 40.0	5	28	17.9
40.0- 50.0	0	6	0.0
50.0- 60.0	2	3	66.7
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	692		

SEP 22, 1983 OUTSIDE UNSH HIROSHIMA GROUPS PERCENT INJURY-- BURNS NO MECH SEVERE RAD

CAL	LIGHT BURNS CASES	TOTAL	PERCENT	MOD BURNS CASES	TOTAL	PERCENT	SEVERE BURNS CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0	0	11	0.0	0	11	0.0
1.0- 1.5	0	41	0.0	2	41	4.9	0	41	0.0
1.5- 2.0	1	47	2.1	7	47	14.9	0	47	0.0
2.0- 2.5	0	19	0.0	7	19	36.8	1	19	5.3
2.5- 3.0	0	16	0.0	4	16	25.0	3	16	18.8
3.0- 3.5	0	19	0.0	6	19	31.6	5	19	26.3
3.5- 4.0	0	40	0.0	14	40	35.0	15	40	37.5
4.0- 4.5	1	45	2.2	18	45	40.0	15	45	33.3
4.5- 5.0	0	34	0.0	8	34	23.5	20	34	58.8
5.0- 5.5	0	149	0.0	33	149	22.1	90	149	60.4
5.5- 6.0	0	99	0.0	25	99	25.3	60	99	60.6
6.0- 7.0	0	66	0.0	19	66	28.8	37	66	56.1
7.0- 8.0	0	124	0.0	41	124	33.1	45	124	36.3
8.0- 10.0	1	442	0.2	133	442	30.1	146	442	33.0
10.0- 12.0	1	468	0.2	219	468	46.8	70	468	15.0
12.0- 14.0	0	154	0.0	49	154	31.8	36	154	23.4
14.0- 16.0	0	109	0.0	31	109	28.4	29	109	26.6
16.0- 18.0	0	62	0.0	16	62	25.8	13	62	21.0
18.0- 20.0	0	73	0.0	19	73	26.0	10	73	13.7
20.0- 25.0	0	115	0.0	34	115	29.6	10	115	8.7
25.0- 30.0	0	69	0.0	23	69	33.3	11	69	15.9
30.0- 40.0	0	28	0.0	3	28	10.7	4	28	14.3
40.0- 50.0	0	6	0.0	1	6	16.7	1	6	16.7
50.0- 60.0	0	3	0.0	1	3	33.3	1	3	33.3
60.0- 80.0	0	1	0.0	0	1	0.0	0	1	0.0
80.0-100.0	0	2	0.0	0	2	0.0	0	2	0.0
100.0-125.0	0	0	*****	0	0	*****	0	0	*****
	4			713			622		

SEP 22, 1983 OUTSIDE UNSH HIROSHIMA GROUPS PERCENT INJURY-- BURNS LIGHT MECH SEVERE RAD

LIGHT BURNS				MOD BURNS				SEVERE BURNS			
CAL	CASES	TOTAL	PERCENT	CAL	CASES	TOTAL	PERCENT	CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0	0.5- 1.0	0	11	0.0	0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0	1.0- 1.5	2	41	4.9	1.0- 1.5	0	41	0.0
1.5- 2.0	1	47	2.1	1.5- 2.0	7	47	14.9	1.5- 2.0	0	47	0.0
2.0- 2.5	0	19	0.0	2.0- 2.5	7	19	36.8	2.0- 2.5	1	19	5.3
2.5- 3.0	0	16	0.0	2.5- 3.0	4	16	25.0	2.5- 3.0	3	16	18.8
3.0- 3.5	0	19	0.0	3.0- 3.5	6	19	31.6	3.0- 3.5	5	19	26.3
3.5- 4.0	0	40	0.0	3.5- 4.0	14	40	35.0	3.5- 4.0	15	40	37.5
4.0- 4.5	1	45	2.2	4.0- 4.5	18	45	40.0	4.0- 4.5	15	45	33.3
4.5- 5.0	0	34	0.0	4.5- 5.0	8	34	23.5	4.5- 5.0	20	34	58.8
5.0- 5.5	0	149	0.0	5.0- 5.5	34	149	22.8	5.0- 5.5	93	149	62.4
5.5- 6.0	0	99	0.0	5.5- 6.0	26	99	26.3	5.5- 6.0	63	99	63.6
6.0- 7.0	0	66	0.0	6.0- 7.0	19	66	28.8	6.0- 7.0	37	66	56.1
7.0- 8.0	0	124	0.0	7.0- 8.0	41	124	33.1	7.0- 8.0	46	124	37.1
8.0- 10.0	1	442	0.2	8.0- 10.0	135	442	30.5	8.0- 10.0	150	442	33.9
10.0- 12.0	1	468	0.2	10.0- 12.0	219	468	46.8	10.0- 12.0	71	468	15.2
12.0- 14.0	0	154	0.0	12.0- 14.0	49	154	31.8	12.0- 14.0	37	154	24.0
14.0- 16.0	0	109	0.0	14.0- 16.0	31	109	28.4	14.0- 16.0	29	109	26.6
16.0- 18.0	0	62	0.0	16.0- 18.0	16	62	25.8	16.0- 18.0	13	62	21.0
18.0- 20.0	0	73	0.0	18.0- 20.0	20	73	27.4	18.0- 20.0	10	73	13.7
20.0- 25.0	0	115	0.0	20.0- 25.0	34	115	29.6	20.0- 25.0	10	115	8.7
25.0- 30.0	1	69	1.4	25.0- 30.0	23	69	33.3	25.0- 30.0	11	69	15.9
30.0- 40.0	0	28	0.0	30.0- 40.0	3	28	10.7	30.0- 40.0	4	28	14.3
40.0- 50.0	0	6	0.0	40.0- 50.0	1	6	16.7	40.0- 50.0	1	6	16.7
50.0- 60.0	0	3	0.0	50.0- 60.0	1	3	33.3	50.0- 60.0	1	3	33.3
60.0- 80.0	0	1	0.0	60.0- 80.0	0	1	0.0	60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0	80.0-100.0	0	2	0.0	80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****	100.0-125.0	0	0	*****	100.0-125.0	0	0	*****
	5				718				635		

SEP 22, 1983 OUTSIDE UNSH HIROSHIMA GROUPS PERCENT INJURY-- BURNS MOD MECH SEVERE RAD

LIGHT BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0
1.5- 2.0	1	47	2.1
2.0- 2.5	0	19	0.0
2.5- 3.0	0	16	0.0
3.0- 3.5	0	19	0.0
3.5- 4.0	0	40	0.0
4.0- 4.5	1	45	2.2
4.5- 5.0	0	34	0.0
5.0- 5.5	0	149	0.0
5.5- 6.0	0	99	0.0
6.0- 7.0	0	66	0.0
7.0- 8.0	0	124	0.0
8.0- 10.0	1	442	0.2
10.0- 12.0	2	468	0.4
12.0- 14.0	0	154	0.0
14.0- 16.0	0	109	0.0
16.0- 18.0	0	62	0.0
18.0- 20.0	0	73	0.0
20.0- 25.0	0	115	0.0
25.0- 30.0	1	69	1.4
30.0- 40.0	0	28	0.0
40.0- 50.0	0	6	0.0
50.0- 60.0	0	3	0.0
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	6		

MOD BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	2	41	4.9
1.5- 2.0	7	47	14.9
2.0- 2.5	7	19	36.8
2.5- 3.0	4	16	25.0
3.0- 3.5	6	19	31.6
3.5- 4.0	15	40	37.5
4.0- 4.5	18	45	40.0
4.5- 5.0	11	34	32.4
5.0- 5.5	39	149	26.2
5.5- 6.0	29	99	29.3
6.0- 7.0	19	66	28.8
7.0- 8.0	48	124	38.7
8.0- 10.0	150	442	33.9
10.0- 12.0	243	468	51.9
12.0- 14.0	68	154	44.2
14.0- 16.0	37	109	33.9
16.0- 18.0	22	62	35.5
18.0- 20.0	24	73	32.9
20.0- 25.0	42	115	36.5
25.0- 30.0	30	69	43.5
30.0- 40.0	5	28	17.9
40.0- 50.0	3	6	50.0
50.0- 60.0	1	3	33.3
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	830		

SEVERE BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0
1.5- 2.0	0	47	0.0
2.0- 2.5	1	19	5.3
2.5- 3.0	3	16	18.8
3.0- 3.5	7	19	36.8
3.5- 4.0	16	40	40.0
4.0- 4.5	17	45	37.8
4.5- 5.0	22	34	64.7
5.0- 5.5	100	149	67.1
5.5- 6.0	64	99	64.6
6.0- 7.0	39	66	59.1
7.0- 8.0	45	124	36.3
8.0- 10.0	159	442	36.0
10.0- 12.0	75	468	16.0
12.0- 14.0	40	154	26.0
14.0- 16.0	34	109	31.2
16.0- 18.0	13	62	21.0
18.0- 20.0	13	73	17.8
20.0- 25.0	13	115	11.3
25.0- 30.0	13	69	18.8
30.0- 40.0	7	28	25.0
40.0- 50.0	1	6	16.7
50.0- 60.0	1	3	33.3
60.0- 80.0	0	1	0.0
80.0-100.0	1	2	50.0
100.0-125.0	0	0	*****
	684		

SEP 22, 1983 OUTSIDE UNSH HIROSHIMA GROUPS PERCENT INJURY-- BURNS SEVERE MECH SEVERE RAD

LIGHT BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0
1.5- 2.0	1	47	2.1
2.0- 2.5	0	19	0.0
2.5- 3.0	0	16	0.0
3.0- 3.5	0	19	0.0
3.5- 4.0	0	40	0.0
4.0- 4.5	1	45	2.2
4.5- 5.0	0	34	0.0
5.0- 5.5	0	149	0.0
5.5- 6.0	0	99	0.0
6.0- 7.0	0	66	0.0
7.0- 8.0	0	124	0.0
8.0- 10.0	1	442	0.2
10.0- 12.0	1	468	0.2
12.0- 14.0	0	154	0.0
14.0- 16.0	0	109	0.0
16.0- 18.0	0	62	0.0
18.0- 20.0	0	73	0.0
20.0- 25.0	0	115	0.0
25.0- 30.0	0	69	0.0
30.0- 40.0	0	28	0.0
40.0- 50.0	0	6	0.0
50.0- 60.0	0	3	0.0
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	4		

MOD BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	2	41	4.9
1.5- 2.0	7	47	14.9
2.0- 2.5	7	19	36.8
2.5- 3.0	4	16	25.0
3.0- 3.5	6	19	31.6
3.5- 4.0	14	40	35.0
4.0- 4.5	19	45	42.2
4.5- 5.0	8	34	23.5
5.0- 5.5	34	149	22.8
5.5- 6.0	25	99	25.3
6.0- 7.0	20	66	30.3
7.0- 8.0	41	124	33.1
8.0- 10.0	133	442	30.1
10.0- 12.0	220	468	47.0
12.0- 14.0	49	154	31.8
14.0- 16.0	31	109	28.4
16.0- 18.0	16	62	25.8
18.0- 20.0	19	73	26.0
20.0- 25.0	35	115	30.4
25.0- 30.0	23	69	33.3
30.0- 40.0	3	28	10.7
40.0- 50.0	1	6	16.7
50.0- 60.0	1	3	33.3
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	718		

SEVERE BURNS

CAL	CASES	TOTAL	PERCENT
0.5- 1.0	0	11	0.0
1.0- 1.5	0	41	0.0
1.5- 2.0	0	47	0.0
2.0- 2.5	1	19	5.3
2.5- 3.0	3	16	18.8
3.0- 3.5	5	19	26.3
3.5- 4.0	15	40	37.5
4.0- 4.5	15	45	33.3
4.5- 5.0	20	34	58.8
5.0- 5.5	91	149	61.1
5.5- 6.0	60	99	60.6
6.0- 7.0	37	66	56.1
7.0- 8.0	46	124	37.1
8.0- 10.0	148	442	33.5
10.0- 12.0	70	468	15.0
12.0- 14.0	37	154	24.0
14.0- 16.0	29	109	26.6
16.0- 18.0	13	62	21.0
18.0- 20.0	10	73	13.7
20.0- 25.0	10	115	8.7
25.0- 30.0	11	69	15.9
30.0- 40.0	4	28	14.3
40.0- 50.0	1	6	16.7
50.0- 60.0	1	3	33.3
60.0- 80.0	0	1	0.0
80.0-100.0	0	2	0.0
100.0-125.0	0	0	*****
	627		

APPENDIX B

SUMMARY COUNTS OF EACH INJURY SYMPTOM

Hiroshima Outside Unshielded
Hiroshima Wood Shielded - Outside
Hiroshima Wood Shielded - Inside
Hiroshima Wood Shielded - Total
Nagasaki Wood Shielded - Outside
Nagasaki Wood Shielded - Inside
Nagasaki Wood Shielded - Total

BN	MC	TOTAL	♦V O M I T ♦ONSET	DUR	♦ DIARRHEA ♦ONSET	DUR	♦BOIA ♦ONSET	♦MALS ♦ANOR	♦GING & ♦ONSET	PHAR DUR	♦NGEP ♦ONSET	♦PURP / ♦ONSET	PET DUR	♦SCALP ♦PRCNT	EPIL CNSET	♦REPRC ♦ABNOR	♦FEVER ♦ONSET	♦MAJCR ♦COMPL	♦LWST	♦HEMO ♦LWST	♦ ♦LWST	♦HOSP ♦DISC
N	N	396	33	32	100	99	9	114	51	51	0	29	28	37	37	64	76	53	37	59	120	2
			396	395	393	392	395	307	396	396	391	396	395	396	396	295	395	322	37	62	120	353
N	LT	7	1	1	3	3	0	1	1	1	0	0	0	0	0	0	2	1	2	3	3	0
			7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	2	3	3	6
N	MD	118	22	22	37	37	6	40	24	24	0	22	22	30	30	14	36	33	10	18	37	0
			118	118	117	117	118	75	118	118	105	118	118	117	117	69	113	84	10	19	37	68
N	SV	13	2	2	6	6	0	7	4	4	0	0	0	3	3	4	2	4	0	5	5	0
			13	13	13	13	13	12	13	13	12	13	13	13	13	11	13	11	0	5	5	10
N	TL	534	58	57	146	145	15	162	80	80	0	51	50	70	70	82	116	91	49	85	165	2
			534	533	530	529	533	401	534	534	515	534	533	533	533	381	528	424	49	89	165	427
LT	N	13	0	0	6	6	0	8	1	1	0	0	0	0	0	2	2	1	1	2	4	0
			13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	1	2	4	12
LT	LT	1	0	0	1	1	1	1	0	0	0	1	1	0	0	1	1	0	0	0	1	0
			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1
LT	MD	4	0	0	0	0	0	3	2	2	1	2	2	2	2	1	2	2	0	3	4	0
			4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0	3	4	4
LT	SV	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0
			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1
LT	TL	19	0	0	7	7	1	12	4	4	1	3	3	2	2	5	5	3	1	5	9	0
			19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	1	5	9	18
MD	N	1381	252	282	400	400	89	483	234	234	1	119	117	404	404	144	624	559	150	217	291	49
			1350	1350	1348	1348	1352	777	1363	1363	1256	1364	1362	1361	1361	688	1320	989	150	218	291	667
MD	LT	16	2	2	2	2	0	9	4	4	0	0	0	5	5	5	10	6	3	6	10	
			16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	3	6	10	15
MD	MD	262	70	70	105	105	29	87	70	70	0	51	51	115	115	26	140	127	12	18	30	4
			256	256	255	255	255	119	260	260	215	261	261	259	259	89	2[illegible]	177	12	18	30	65
MD	SV	12	3	3	3	3	1	7	4	4	0	2	2	5	5	4	5	5	1	2	2	0
			12	12	12	12	12	11	12	12	10	12	12	12	12	11	12	12	1	2	2	8
MD	TL	1671	357	357	510	510	119	586	312	312	1	172	170	529	529	179	779	697	166	243	333	[illegible]
			1634	1634	1631	1631	1635	923	1651	1651	1497	1653	1651	1648	1648	804	1594	1194	166	244	323	715

DEC 07, 1983 HIROSHIMA OUTSIDE UNSHIELDED INJURY/SYMPTOMS SUMMARY TOT REC: 3370

BM	MC	TOTAL	VOMIT ONSET	VOMIT DUR	DIARRHEA ONSET	DIARRHEA DUR	BDIA ONSET	MALS ANOR	GING ONSET	PHAR DUR	NGEP ONSET	PURP / PET ONSET	PET DUR	SCALP PRCNT	EPIL ONSET	REPRC ABNOR	FEVER ONSET	MAJCR COMPL	RBC LWST	HEMO LWST	WBC LWST	HOSP DISC
SV	N	1007	189	189	319	319	58	502	177	177	1	43	43	239	238	247	547	431	54	220	280	21
			992	992	991	991	990	795	997	997	966	997	997	996	996	775	986	876	54	221	280	716
SV	LT	23	8	8	8	8	3	17	4	4	0	2	2	6	6	8	13	4	5	7	9	1
			23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	5	7	9	20
SV	MD	107	28	28	41	41	8	61	30	30	0	10	10	44	44	16	62	53	6	19	26	0
			107	107	106	106	104	82	106	106	94	107	107	107	107	74	106	94	6	20	26	69
SV	SV	9	2	2	7	7	2	6	2	2	0	0	0	4	4	3	7	7	0	3	4	0
			9	9	9	9	9	9	9	9	9	9	9	9	9	5	9	9	0	3	4	8
SV	TL	1146	227	227	375	375	71	586	213	213	1	55	55	293	292	276	629	495	65	249	319	22
			1131	1131	1129	1129	1126	909	1135	1135	1092	1136	1136	1135	1135	881	1124	1002	65	251	319	813
TL	N	2797	504	503	825	824	156	1107	463	463	2	191	188	680	679	457	1249	1044	242	498	695	72
			2751	2750	2745	2744	2750	1892	2769	2769	2626	2770	2767	2766	2766	1771	2714	2200	242	503	695	1688
TL	LT	47	11	11	14	14	4	28	9	9	0	3	3	11	11	14	26	11	10	16	23	3
			47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	10	16	23	42
TL	MD	491	120	120	183	183	43	191	126	126	1	85	85	191	191	59	240	215	28	58	57	4
			485	485	482	482	481	280	488	488	418	490	490	487	487	235	469	359	28	60	97	226
TL	SV	35	7	7	16	16	3	20	11	11	0	2	2	12	12	12	14	16	1	10	11	0
			35	35	35	35	35	33	35	35	32	35	35	35	35	32	35	33	1	10	11	27
TL	TL	3370	642	641	1038	1037	206	1346	609	609	3	281	278	896	893	542	1529	1286	281	582	826	79
			3318	3317	3309	3308	3313	2252	3339	3339	3123	3342	3339	3335	3335	2085	3265	2639	281	585	826	1383

JAN 26, 1984 HIROSHIMA WOOD SHIELDED-OUTSIDE-INJURY/SYMPTOMS SUMMARY IDT REC: 2141

MC	BN	TOTAL	VOMIT ONSET	VOMIT DUR	DIARRHEA ONSET	DIARRHEA DUR	BDTA ONSET	MALS ABOR	GING ONSET	PHAR DUR	NG&P ONSET	PURP / PET ONSET	PET DUR	SCALP PRCNT	EPIL ONSET	REPRO ABNOR	FEVER ONSET	MAJOR COMPL	RBC LWST	HEMO LWST	WBC LWST	MULSP DISC
N	N	937	104	103	197	196	55	115	97	96	1	86	86	115	115	79	151	135	18	31	80	1
			929	928	931	930	524	311	933	932	874	933	933	931	931	268	925	303	18	31	80	688
N	LT	9	0	0	4	4	0	3	2	2	0	0	0	1	1	2	1	1	0	2	3	0
			9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	0	2	3	9
N	MD	220	53	52	53	53	19	71	48	48	2	40	40	54	53	37	85	77	24	33	62	4
			212	211	212	212	212	133	216	216	197	214	214	214	213	119	210	135	24	33	62	101
N	SV	45	6	6	20	20	3	28	7	7	0	2	2	9	9	14	23	20	4	11	12	2
			44	44	44	44	43	42	44	44	44	44	44	44	44	40	44	45	4	11	12	40
N	TL	1211	163	161	274	273	77	217	154	153	3	128	128	179	178	132	260	233	46	77	157	7
			1194	1192	1196	1195	1188	495	1202	1201	1124	1200	1200	1198	1197	436	1188	496	46	79	157	
LT	N	52	9	9	20	20	1	32	12	12	0	8	8	5	5	9	13	13	5	11	13	1
			52	52	52	52	52	52	52	52	51	52	52	52	52	50	52	51	5	11	13	49
LT	LT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT	MD	9	3	3	6	6	2	7	3	3	0	2	2	4	4	5	6	7	1	6	8	0
			9	9	9	9	8	9	9	9	9	9	9	9	9	8	9	9	1	6	8	9
LT	SV	4	0	0	3	3	1	2	0	0	0	0	0	0	0	2	3	2	0	1	1	0
			4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0	1	1	4
LT	TL	65	12	12	29	29	4	41	15	15	0	10	10	9	9	16	22	22	6	18	27	1
			65	65	65	65	64	65	65	65	64	65	65	65	65	62	65	64	6	18	27	62
MD	N	713	137	137	232	229	60	156	134	134	2	139	138	188	189	74	228	213	9	30	47	4
			706	706	707	704	700	250	711	711	614	708	707	709	709	185	699	293	9	30	47	
MD	LT	3	1	1	1	1	0	2	2	2	0	0	0	1	1	1	2	2	0	0	0	0
			3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	0	0	3
MD	MD	87	23	23	30	30	7	29	27	27	2	18	18	31	31	15	38	36	5	9	15	1
			86	86	87	87	87	43	87	87	71	86	86	87	87	40	85	47	5	9	15	31
MD	SV	10	1	1	5	5	0	8	2	2	0	1	1	3	3	2	7	5	0	2	3	0
			10	10	10	10	10	9	10	10	10	10	10	10	10	9	10	9	0	2	3	8
MD	TL	818	162	162	268	265	67	195	165	165	4	158	157	223	223	92	275	256	14	41	65	5
			805	805	807	804	800	305	811	811	699	807	806	809	809	237	797	352	14	41	65	192

JAN 26, 1984 HIROSHIMA WOOD SHIELDED-OUTSIDE-INJURY/SYMPTOMS SUMMARY TOT REC: 2143

MC	EN	TOTAL	VOMIT ONSET	VOMIT DUR	DIARRHEA ONSET	DIARRHEA DUR	BDIA ONSET	MALS ANCR	GING & ONSET	PHAR DUR	NGEP ONSET	PURP / ONSET	PET DUR	SCALP PRCAT	EPIL ONSET	REPRC ADNOR	FEVER ONSET	MAJOR COMPL	RBC LWST	HEMO LWST	WBC LWST	HOSP DISC
SV	N	39	6	6	14	14	2	17	10	10	1	12	12	8	8	7	14	16	2	6	7	2
			39	38	38	39	38	27	38	38	36	38	38	39	38	24	39	27	2	6	7	15
SV	LT	2	1	1	1	1	0	2	1	1	0	1	1	1	1	2	1	1	1	0	1	0
			2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1
SV	MD	6	1	1	3	3	2	4	3	3	0	2	2	3	3	1	2	2	0	0	1	0
			6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	4	0	0	1	3
SV	SV	2	0	0	0	0	0	2	0	0	0	0	0	0	0	2	1	2	0	1	1	0
			2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	1	1	2
SV	TL	49	8	8	18	18	4	25	14	14	1	15	15	12	12	12	18	21	3	7	10	2
			48	48	48	48	48	37	48	48	46	48	48	48	48	34	49	35	3	8	10	5
TL	N	1746	256	255	463	459	118	320	253	252	4	245	244	316	316	169	406	377	14	79	152	8
			1725	1724	1728	1724	1714	640	1734	1733	1575	1731	1730	1730	1730	527	1715	674	34	78	152	906
TL	LT	14	2	2	6	6	0	7	5	5	0	1	1	3	3	5	4	4	1	2	4	0
			14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	1	3	4	13
TL	MD	322	80	79	92	92	30	111	81	81	4	62	62	92	91	58	131	122	30	48	86	5
			313	312	314	314	313	191	318	318	283	315	315	316	315	173	310	195	30	50	86	144
TL	SV	61	7	7	28	28	4	40	9	9	0	3	3	12	12	20	34	29	4	15	17	2
			60	60	60	60	59	57	60	60	60	60	60	60	60	55	60	60	4	15	17	54
TL	TL	2143	345	343	589	585	152	478	348	347	8	311	310	423	422	252	575	532	69	143	259	15
			2112	2110	2116	2112	2100	902	2126	2125	1932	2120	2119	2120	2119	769	2099	947	69	146	259	1117

MC	BN	TOTAL	VOMIT ONSET	VOMIT DUR	DIARRHEA ONSET	DIARRHEA DUR	COLIA ONSET	MALS ANOR	GING & ONSET	PHAR DUR	NGLP ONSET	PURP / ONSET	PET DUR	SCALP PRCNT	EPIL ONSET	REPRO ABNOR	FEVER ONSET	MAJOR COMPL	RBC LWST	HEMO LWST	WBC LWST	MD DISC	SP SC
N	N	4989	431	430	946	945	260	604	408	406	11	384	380	459	459	461	645	597	181	248	542	34	
			4939	4938	4931	4930	4525	1707	4960	4958	4719	4960	4957	4956	4956	1496	4915	1613	181	249	542	3927	
N	LT	15	1	1	4	4	0	5	5	5	0	1	1	5	5	5	6	6	3	6	7	1	
			15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	3	6	7	12	
N	MD	447	84	84	124	123	36	101	63	63	1	58	58	96	96	53	134	126	21	35	59	5	
			425	426	423	422	426	171	431	431	400	431	431	431	431	147	415	214	21	35	59	113	
N	SV	72	11	11	25	25	5	24	9	9	0	5	5	16	16	14	23	22	6	15	18	1	
			70	70	71	71	70	47	71	71	68	71	71	72	72	45	71	54	6	15	19	34	
N	TL	5523	527	526	1039	1097	301	734	485	483	12	448	444	576	576	533	808	751	211	304	626	41	
			5449	5449	5440	5438	5436	1940	5477	5475	5202	5477	5474	5474	5474	1703	5416	1896	211	305	626	4[illegible]	
LT	N	158	18	18	62	62	15	76	29	29	0	14	14	16	16	52	40	34	12	40	57	2	
			157	157	158	158	158	157	158	158	157	158	158	158	158	154	156	156	12	40	57	152	
LT	LT	3	1	1	1	1	1	3	2	2	0	0	0	2	2	0	2	2	0	1	3	0	
			3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	1	3	1	
LT	MD	3	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	1	3	0	
			3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	1	3	3	
LT	SV	4	0	0	3	3	0	2	2	2	0	0	0	0	0	2	2	2	1	1	3	0	
			4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	1	1	3	4	
LT	TL	168	19	19	66	66	17	81	33	33	0	14	14	18	18	56	44	38	13	43	66	2	
			167	167	168	168	168	167	168	168	167	168	168	168	168	164	166	166	13	43	66	160	
MD	N	5925	1071	1071	1737	1729	450	1227	888	886	5	887	879	1181	1182	686	1656	1580	160	343	575	63	
			5837	5836	5831	5825	5819	2203	5858	5856	5306	5866	5859	5850	5851	1793	5750	2480	160	349	575	1	
MD	LT	12	0	0	7	7	0	8	6	6	0	1	1	5	5	5	5	3	0	3	6	0	
			12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	0	3	6	11	
MD	MD	454	143	143	172	172	39	147	117	117	6	104	103	182	182	76	221	218	14	30	35	16	
			443	443	444	444	438	197	442	442	367	445	445	444	444	164	430	276	14	30	35	129	
MD	SV	59	12	11	19	19	7	23	13	13	0	9	9	19	18	14	29	26	4	4	7	0	
			58	57	58	58	58	35	57	57	49	58	58	59	59	34	58	44	4	4	7	31	
MD	TL	6450	1225	1225	1935	1927	496	1405	1024	1022	15	1001	992	1386	1387	781	1911	1927	178	385	623	79	
			6350	6348	6345	6339	6327	2447	6369	6367	5734	6381	6374	6365	6366	2003	6250	2912	178	386	623	1622	

JAN 26, 1984 HIROSHIMA WOOD SHIELDED--INSIDE-INJURY/SYMPTOMS SUMMARY TOT REC: 12776

MC	BN	TOTAL	VOMIT ONSET	VOMIT DUR	DIARRHEA ONSET	DIARRHEA DUR	BOIA ONSET	MALS ANOR	GING & PHAR ONSET	GING & PHAR DUR	NC&P ONSET	PURP / PET ONSET	PURP / PET DUR	SCALP EPIL PRCNT	SCALP EPIL ONSET	REPRO ABNOR	FEVER ONSET	MAJOR COMPL	RBC LWST	HEMO LWST	WBC LWST	MOSP DISC
SV	N	567	122	121	225	225	52	326	145	145	10	99	98	153	153	156	242	244	77	195	232	44
			561	561	562	562	558	488	562	562	530	559	559	562	562	448	560	481	77	185	232	372
SV	LT	4	1	1	2	2	1	2	1	1	0	1	1	2	2	1	2	2	0	2	3	0
			4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0	2	3	3
SV	MD	50	10	10	29	28	3	28	20	20	1	10	10	19	19	14	25	21	6	14	21	4
			50	50	49	48	50	38	50	50	45	50	50	49	49	37	49	38	6	14	21	29
SV	SV	14	4	4	5	5	1	10	6	6	0	3	3	3	3	6	7	6	0	5	5	1
			14	14	13	13	13	12	14	14	13	14	14	13	13	12	14	13	0	5	5	11
SV	TL	635	137	136	261	260	57	366	172	172	11	113	112	177	177	177	276	273	83	206	261	49
			629	629	628	627	625	542	630	630	592	627	627	628	628	501	627	536	83	206	261	1
TL	N	11639	1542	1640	2970	2961	777	2233	1470	1466	30	1384	1371	1809	1810	1355	2583	2455	430	821	1406	143
			11493	11492	11482	11475	11460	4555	11538	11534	10712	11543	11533	11526	11527	3891	11381	4750	430	823	1406	5902
TL	LT	34	3	3	14	14	2	18	14	14	0	3	3	14	14	11	15	13	3	12	19	1
			34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	3	12	19	27
TL	MD	954	237	237	325	323	79	276	200	200	8	172	171	297	297	145	380	365	41	80	118	25
			922	922	919	917	917	409	926	926	815	929	929	927	927	351	897	531	41	80	118	274
TL	SV	149	27	26	52	52	13	59	30	30	0	17	17	37	37	36	61	56	11	25	33	7
			146	145	146	146	145	98	146	146	134	147	147	148	148	95	147	115	11	25	33	90
TL	TL	12776	1909	1906	3361	3350	871	2586	1714	1710	38	1576	1562	2157	2158	1547	3039	2889	485	938	1576	171
			12595	12593	12581	12572	12556	5096	12644	12640	11695	12653	12643	12635	12636	4371	12459	5410	485	940	1576	6281

JAN 26, 1984 HIROSHIMA WOOD SHIELDED--TOTAL--INJURY/SYMPTOMS SUMMARY TOT RECS: 14919

MC	BN	TOTAL	VOMIT ONSET	VOMIT DUR	DIARRHEA ONSET	DIARRHEA DUR	BLOODIA ONSET	MALAISE ANOR	DIZZINESS ONSET	PHARYNGEAL PAIN DUR	PURPURA ONSET	PETECHIAE ONSET	PETECHIAE DUR	SCALP PRCNT	EPILATION ONSET	REPRODUCTIVE ADNOR	FEVER ONSET	MAJOR COMPL	RBC LWST	HEMOGLOBIN LWST	WBC LWST	HOSPITAL DISC
N	N	5926	535	533	1143	1141	315	719	505	502	12	470	466	574	574	540	796	732	199	279	622	35
			5867	5866	5862	5860	5849	2018	5893	5890	5593	5893	5890	5887	5887	1764	5840	1916	199	280	622	4615
N	LT	24	1	1	8	8	0	9	7	7	0	1	1	6	6	7	7	7	3	8	10	1
			24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	3	8	10	21
N	MD	667	137	136	177	176	55	172	111	111	3	98	98	150	149	90	219	203	45	68	121	9
			638	637	635	634	638	304	647	647	597	645	645	645	644	266	625	353	45	70	121	214
N	SV	117	17	17	45	45	8	52	16	16	0	7	7	25	25	28	46	42	10	26	30	3
			114	114	115	115	113	89	115	115	112	115	115	116	116	85	115	99	10	26	30	74
N	TL	6734	690	687	1373	1370	378	951	639	636	15	576	572	755	754	665	1068	984	257	381	783	49
			6643	6641	6636	6633	6624	2435	6679	6676	6326	6677	6674	6672	6671	2139	6604	2392	257	384	783	4
LT	N	210	27	27	82	82	16	108	41	41	0	22	22	21	21	61	53	47	17	51	75	3
			209	209	210	210	210	209	210	210	208	210	210	210	210	204	208	207	17	51	75	201
LT	LT	3	1	1	1	1	1	3	2	2	0	0	0	2	2	0	2	2	0	1	3	0
			3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	1	3	1
LT	MD	12	3	3	6	6	3	7	3	3	0	2	2	4	4	7	6	7	1	7	11	0
			12	12	12	12	11	12	12	12	12	12	12	12	12	11	12	12	1	7	11	12
LT	SV	8	0	0	6	6	1	4	2	2	0	0	0	0	0	4	5	4	1	2	4	0
			8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	1	2	4	8
LT	TL	233	31	31	95	95	21	122	48	48	0	24	24	27	27	72	66	60	19	61	93	3
			232	232	233	233	232	232	233	233	231	233	233	233	233	226	231	230	19	61	93	222
MD	N	6643	1209	1208	1959	1958	510	1383	1022	1020	11	1026	1017	1369	1370	760	1884	1793	169	379	622	67
			6543	6542	6538	6529	6519	2453	6569	6567	5920	6574	6566	6559	6560	1978	6449	2773	169	379	622	1
MD	LT	15	1	1	8	8	0	10	8	8	0	1	1	6	6	6	7	5	0	3	6	0
			15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	0	3	6	14
MD	MD	541	166	166	202	202	46	176	144	144	8	122	121	213	213	91	259	254	19	39	50	17
			529	529	531	531	525	240	529	529	438	531	531	531	531	204	515	323	19	39	50	160
MD	SV	69	13	12	24	24	7	31	15	15	0	10	10	21	21	16	36	31	4	6	10	0
			68	67	68	68	66	44	67	67	59	68	68	69	69	43	68	53	4	6	10	39
MD	TL	7268	1388	1387	2203	2152	563	1600	1189	1187	19	1159	1149	1609	1610	873	2186	2083	192	426	689	84
			7155	7153	7152	7143	7127	2752	7180	7178	6432	7188	7180	7174	7175	2240	7047	3164	192	427	689	1914

JAN 26, 1984 HIROSHIMA WOOD SHIELDED--TOTAL--INJURY/SYMPTOMS SUMMARY TOT REC: 14919

MC	BN	TOTAL	VOMIT ONSET	VOMIT DUR	DIARRHEA ONSET	DIARRHEA DUR	BOIA ONSET	MALS ANOR	GING & ONSET	PHAR DUR	NGSP ONSET	PURP / ONSET	PET DUR	SCALP PRCNT	EPIL ONSET	REPRO ABNOR	FEVER ONSET	MAJOR COMPL	RBC LWST	HEMO LWST	WBC LWST	HOSP DISC
SV	N	606	128	127	239	239	54	343	155	155	11	111	110	161	161	163	256	260	79	191	239	45
			599	599	600	600	596	515	600	600	566	557	597	600	600	472	599	508	79	191	239	391
SV	LT	6	2	2	3	3	1	4	2	2	0	2	2	3	3	3	3	3	1	2	4	0
			6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	1	3	4	4
SV	MD	56	11	11	32	31	5	32	23	23	1	12	12	22	22	15	27	23	6	14	22	4
			56	56	55	54	56	44	56	56	51	56	56	55	55	43	55	42	6	14	22	32
SV	SV	16	4	4	5	5	1	12	6	6	0	3	3	3	3	8	8	8	0	6	6	1
			16	16	15	15	15	14	16	16	15	16	16	15	15	14	16	15	0	6	6	13
SV	TL	684	145	144	279	278	61	391	186	186	12	128	127	189	189	186	294	294	86	213	271	51
			677	677	676	675	673	579	678	678	638	675	675	676	676	535	676	571	86	214	271	
TL	N	13385	1399	1895	3433	3420	895	2553	1723	1718	34	1629	1615	2125	2126	1524	2989	2832	464	899	1558	151
			13215	13216	13210	13159	13174	5195	13272	13267	12287	13274	13263	13256	13257	4418	13096	5404	464	901	1558	6808
TL	LT	48	5	5	20	20	2	25	19	19	0	4	4	17	17	16	19	17	4	14	23	1
			48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	4	15	23	40
TL	MD	1276	317	316	417	415	109	387	281	281	12	234	233	389	388	203	511	497	71	129	204	30
			1235	1234	1233	1231	1230	600	1244	1244	1098	1244	1244	1243	1242	524	1207	730	71	130	204	418
TL	SV	210	34	33	80	80	17	99	39	39	0	20	20	49	49	56	95	85	15	40	50	4
			206	205	206	206	204	155	206	206	194	207	207	208	208	150	207	175	15	40	50	134
TL	TL	14919	2254	2249	3950	3935	1023	3064	2062	2057	46	1887	1872	2580	2580	1795	3614	3421	554	1091	1935	186
			14707	14703	14697	14684	14656	5958	14770	14765	13627	14773	14762	14755	14755	5140	14558	6357	554	1086	1835	7400

JAN 30, 1984 NAGASAKI WCCO SHIELDED-OUTSIDE-INJURY/SYMPTOMS SUMMARY TOT REC: 348

MC	BN	TOTAL	VOMIT ONSET	VOMIT DUR	DIARRHEA ONSET	DIARRHEA DUR	BDIA ONSET	MALS ANOR	GING & PHAR ONSET	GING & PHAR DUR	NGEP ONSET	PURP / PET ONSET	PURP / PET DUR	SCALP PRCNT	EPIL ONSET	REPRO ABNCR	FEVER ONSET	MAJOR COMPL	RBC LWST	HEMO LWST	WBC LWST	HOSP DISC
N	N	171	14	14	35	35	9	24	13	13	1	5	5	12	12	39	19	22	9	6	10	0
			169	169	168	168	169	133	169	169	167	170	170	169	169	131	168	138	9	7	10	138
N	LT	2	0	0	1	1	0	1	0	0	0	0	0	0	0	0	1	1	1	1	1	0
			2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	2
N	MD	44	5	5	14	14	2	15	12	12	3	8	8	13	13	7	16	18	7	9	9	0
			43	43	43	43	43	32	43	43	41	43	43	43	43	32	43	34	7	9	9	19
N	SV	16	4	4	9	9	0	11	3	3	0	3	3	5	5	2	8	10	5	9	10	0
			16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	5	9	10	9
N	TL	233	23	23	59	59	11	51	28	28	4	16	16	30	30	48	44	51	22	25	30	0
			230	230	229	229	230	180	230	230	226	231	231	230	230	181	229	193	22	26	30	168
LT	N	12	1	1	6	6	0	3	0	0	0	0	0	0	0	5	2	4	1	0	1	0
			12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	1	1	1	12
LT	LT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT	MD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT	SV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT	TL	12	1	1	6	6	0	3	0	0	0	0	0	0	0	5	2	4	1	0	1	0
			12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	1	1	1	12
MD	N	77	20	20	24	24	8	20	18	18	0	12	12	12	11	15	22	24	10	9	10	2
			76	76	77	77	76	46	76	76	66	77	77	77	77	46	75	55	10	9	10	36
MD	LT	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1
MD	MD	10	3	3	7	7	1	4	5	5	0	2	2	3	3	2	6	6	1	1	1	0
			10	10	10	10	10	7	10	10	7	10	10	10	10	7	10	10	1	1	1	6
MD	SV	4	0	0	2	2	0	3	0	0	0	0	0	0	0	0	0	0	1	2	2	0
			4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	1	2	2	2
MD	TL	92	23	23	33	33	9	27	23	23	0	14	14	15	14	17	28	30	12	12	13	2
			91	91	92	92	91	58	91	91	78	92	92	92	92	58	90	70	12	12	13	45

JAN 30, 1984 NAGASAKI WOOD SHIELDED-OUTSIDE-INJURY/SYMPTOMS SUMMARY TOT REC: 348

MC	BN	TOTAL	♦V ♦ONSET	O M I T DUR	♦ DIARRHEA ♦ONSET	DUR	♦BLEEDING ♦ONSET	♦MALS ♦ANOR	♦GINGIVAL ♦ONSET	PHAR DUR	♦NGEP ♦ONSET	♦PURP ♦ONSET	/ PET DUR	♦SCALP ♦PRCNT	EPIL ENSET	♦REPRO ♦ABNOR	♦FEVER ♦ONSET	♦MAJOR ♦COMPL	RBC ♦LWST	♦HEMO ♦LWST	♦ WBC ♦LWST	♦HCSP ♦DISC
SV	N	10	1	1	4	4	0	5	1	1	0	0	0	3	3	2	2	2	3	4	4	1
			10	10	10	10	10	10	10	10	9	10	10	10	10	10	10	10	3	4	4	7
SV	LT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SV	MD	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0
SV	SV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SV	TL	11	1	1	4	4	0	6	1	1	0	0	0	3	3	2	3	3	3	4	4	1
			11	11	11	11	11	11	11	11	10	11	11	11	11	11	11	11	3	4	4	7
TL	N	270	36	36	69	69	17	52	32	32	1	17	17	27	26	61	45	52	23	19	25	3
			267	267	267	267	267	198	267	267	254	269	269	268	268	199	265	215	23	21	25	193
TL	LT	3	0	0	1	1	0	1	0	0	0	0	0	0	0	0	1	1	1	1	1	0
			3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	1	1	3
TL	MD	55	8	8	21	21	3	20	17	17	3	10	10	16	16	9	23	25	8	10	10	0
			54	54	54	54	54	40	54	54	49	54	54	54	54	40	54	45	8	10	10	25
TL	SV	20	4	4	11	11	0	14	3	3	0	3	3	5	5	2	8	10	6	11	12	0
			20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	6	11	12	11
TL	TL	348	48	48	102	102	20	87	52	52	4	30	30	48	47	72	77	88	38	41	48	3
			344	344	344	344	344	261	344	344	326	346	346	345	345	262	342	283	38	43	48	232

MC	BN	TOTAL	*V O M I T *ONSET	DUR	* DIARRHEA *ONSET	DUR	*BOIA *ONSET	*MALS *ANOR	*GING & PHAR *ONSET	DUR	*NGEP *ONSET	*PURP / PET *ONSET	DUR	*SCALP EPIL *PRCNT	ONSET	*REPRO *ABNOR	*FEVER *ONSET	*MAJOR *COMPL	* RBC *LWST	*HEMO * *LWST	* WBC *LWST	*HOSP *DISC
N	N	2363	182	182	523	522	112	385	259	259	11	117	117	155	155	393	230	247	181	214	257	6
			2349	2349	2351	2350	2353	1637	2352	2352	2317	2355	2355	2352	2352	1651	2354	1698	181	214	257	1776
N	LT	28	11	11	14	14	0	15	9	9	1	6	6	9	9	7	8	10	11	12	13	3
			27	27	28	28	28	28	28	28	28	28	28	28	28	28	28	28	11	12	13	16
N	MD	226	46	46	73	73	14	78	51	51	1	22	22	45	45	29	58	59	42	57	64	4
			223	223	225	225	225	149	224	224	213	225	225	219	219	149	223	176	42	57	64	94
N	SV	94	26	26	30	30	1	45	24	24	0	5	5	35	35	22	35	35	37	39	38	10
			94	94	94	94	94	94	94	94	93	94	94	94	94	94	94	94	37	39	38	66
N	TL	2711	265	265	640	639	127	523	343	343	13	150	150	244	244	451	331	351	271	322	372	23
			2693	2693	2698	2697	2700	1908	2698	2698	2651	2702	2702	2693	2693	1922	2699	1996	271	322	372	1952
LT	N	96	11	11	37	37	2	38	15	15	1	8	8	10	10	18	25	24	12	12	16	0
			96	96	96	96	95	96	96	96	94	96	96	96	96	96	96	96	12	12	16	81
LT	LT	2	1	1	2	2	0	1	2	2	0	0	0	1	1	1	2	1	1	1	1	0
			2	2	2	2	2	2	2	2	1	1	1	2	2	2	2	2	1	1	1	1
LT	MD	6	2	2	3	3	0	3	3	3	0	2	2	2	2	2	1	0	0	0	1	0
			6	6	6	6	6	6	6	6	5	6	6	6	6	6	6	6	0	0	1	5
LT	SV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT	TL	104	14	14	42	42	2	42	20	20	1	10	10	13	13	21	28	25	13	13	18	0
			104	104	104	104	103	104	104	104	100	103	103	104	104	104	104	104	13	13	18	81
MD	N	1447	323	323	515	514	122	367	324	324	10	207	207	294	293	162	432	438	128	160	192	18
			1434	1434	1429	1429	1428	755	1432	1432	1301	1430	1430	1418	1418	772	1429	977	128	160	192	585
MD	LT	13	2	2	6	6	1	6	2	2	0	0	0	3	3	0	3	2	3	3	5	
			13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	3	3	5	
MD	MD	154	47	47	60	60	19	37	43	43	3	32	32	53	53	25	59	57	23	25	31	6
			153	153	153	153	153	69	154	154	135	152	152	152	152	72	150	103	23	25	31	51
MD	SV	18	7	7	8	8	2	12	5	5	0	3	3	7	6	3	6	7	8	9	9	0
			18	18	18	18	18	18	18	18	18	18	18	18	17	18	18	18	8	9	9	10
MD	TL	1632	379	379	589	588	144	422	374	374	13	242	242	357	355	190	500	504	162	197	237	24
			1618	1618	1613	1613	1612	855	1617	1617	1467	1613	1613	1601	1600	875	1610	1111	162	197	237	656

JAN 30, 1984 NAGASAKI WOOD SHIELDED--INSIDE-INJURY/SYMPTOMS SUMMARY TOT REC: 4702

MC	BN	TOTAL	*V O M I T		* DIARRHEA		*BDIA	*MALS	*GING &		*NGDP	*PURP /	PET	*SCALP EPIL		*REPRO	*FEVER	*MAJOR	RBC	*HEMO	* WBC	*MCSP
			*ONSET	DUR	*ONSET	DUR	*ONSET	*ANOR	*ONSET	PHAR DUR	*ONSET	*ONSET	DUR	*PRCNT	ONSET	*ABNOR	*ONSET	*COMPL	*LWST	*LWST	*LWST	*DISC
SV	N	218	69	69	87	87	15	123	68	68	3	35	35	60	60	52	66	80	67	86	101	13
			216	216	218	218	218	218	218	218	214	217	217	218	218	218	218	218	67	86	101	123
SV	LT	3	2	2	1	1	0	2	1	1	0	2	2	2	2	1	1	1	2	2	2	0
			3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	1
SV	MD	24	10	10	10	10	4	21	7	7	0	5	5	9	9	3	12	10	10	15	17	1
			24	24	24	24	24	24	24	24	24	24	24	24	24	24	23	24	10	15	17	8
SV	SV	10	3	3	4	4	2	7	6	6	2	1	1	7	7	5	6	6	8	9	9	0
			10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	8	9	9	1
SV	TL	255	84	84	102	102	21	153	82	82	5	43	43	78	78	61	85	97	87	112	129	14
			253	253	255	255	255	255	255	255	251	254	254	255	255	255	254	255	87	112	129	137
TL	N	4124	585	585	1162	1160	251	913	666	666	25	367	367	519	518	625	753	789	388	472	566	37
			4095	4095	4094	4093	4094	2706	4098	4098	3926	4098	4098	4084	4084	2737	4097	2989	388	472	566	2565
TL	LT	46	16	16	23	23	1	24	14	14	1	8	8	15	15	9	14	14	17	18	21	3
			45	45	46	46	46	46	46	46	45	45	45	46	46	46	46	46	17	18	21	28
TL	MD	410	105	105	146	146	37	139	104	104	4	61	61	109	109	59	130	126	75	97	113	11
			406	406	408	408	408	248	408	408	377	407	407	401	401	251	402	309	75	97	113	158
TL	SV	122	36	36	42	42	5	64	35	35	2	9	9	49	48	30	47	48	53	57	56	10
			122	122	122	122	122	122	122	122	121	122	122	122	121	122	122	122	53	57	56	77
TL	TL	4702	742	742	1373	1371	294	1140	819	819	32	445	445	692	690	723	944	977	533	644	756	61
			4668	4668	4670	4669	4670	3122	4674	4674	4469	4672	4672	4653	4652	3156	4667	3466	533	644	756	2828

MC	BN	TOTAL	*V O M I T ONSET	DUR	*DIARRHEA ONSET	DUR	*BOIA ONSET	*MALS ANOR	*GING & ONSET	PHAR DUR	*NGEP ONSET	*PURP / ONSET	PET DUR	*SCALP PRCNT	EPIL ONSET	*REPRC ABNOR	*FEVER ONSET	*MAJOR COMPL	*RBC LWST	*HEMO LWST	*WBC LWST	*HCSP DISC
N	N	2534	196	196	558	557	121	409	272	272	12	122	122	167	167	432	249	269	190	220	267	6
			2518	2518	2519	2518	2522	1767	2521	2521	2484	2525	2525	2521	2521	1782	2522	1836	190	221	267	1914
N	LT	30	11	11	15	15	0	16	9	9	1	6	6	9	9	7	9	11	12	13	14	3
			29	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30	12	13	14	18
N	MD	270	51	51	87	87	16	93	63	63	4	30	30	58	58	36	74	77	49	66	73	4
			266	266	268	268	268	181	267	267	254	268	268	262	262	181	266	210	49	66	73	113
N	SV	110	30	30	39	39	1	56	27	27	0	8	8	40	40	24	43	45	42	48	48	10
			110	110	110	110	110	110	110	110	109	110	110	110	110	110	110	110	42	48	48	75
N	TL	2944	288	288	699	698	138	574	371	371	17	166	166	274	274	499	375	402	293	347	402	23
			2923	2923	2927	2926	2930	2088	2928	2928	2877	2933	2933	2923	2923	2103	2928	2186	293	348	402	2120
LT	N	108	12	12	43	43	2	41	15	15	1	8	8	10	10	23	27	23	13	12	17	0
			108	108	108	108	107	108	108	108	106	108	108	108	108	108	108	108	13	13	17	93
LT	LT	2	1	1	2	2	0	1	2	2	0	0	0	1	1	1	2	1	1	1	1	0
			2	2	2	2	2	2	2	2	1	1	1	2	2	2	2	2	1	1	1	1
LT	MD	6	2	2	3	3	0	3	3	3	0	2	2	2	2	2	1	0	0	0	1	0
			6	6	6	6	6	6	6	6	5	6	6	6	6	6	6	6	0	0	1	5
LT	SV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT	TL	116	15	15	48	48	2	45	20	20	1	10	10	13	13	26	30	29	14	13	19	0
			116	116	116	116	115	116	116	116	112	115	115	116	116	116	116	116	14	14	19	99
MD	N	1524	343	343	539	538	130	387	342	342	10	219	219	306	304	177	454	462	138	169	202	20
			1510	1510	1506	1506	1504	801	1508	1508	1367	1507	1507	1495	1495	818	1504	1032	138	169	202	6[illegible]
MD	LT	14	2	2	6	6	1	6	2	2	0	0	0	3	3	0	3	2	3	3	5	0
			14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	3	3	5	11
MD	MD	164	50	50	67	67	20	41	48	48	3	34	34	56	56	27	65	63	24	26	32	6
			163	163	163	163	163	76	164	164	142	162	162	162	162	79	160	113	24	26	32	57
MD	SV	22	7	7	10	10	2	15	5	5	0	3	3	7	6	3	6	7	9	11	11	0
			22	22	22	22	22	22	22	22	22	22	22	22	21	22	22	22	9	11	11	12
MD	TL	1724	402	402	622	621	153	449	397	397	13	256	256	372	369	207	528	534	174	209	250	26
			1709	1709	1705	1705	1703	913	1708	1708	1545	1705	1705	1693	1692	933	1700	1181	174	209	250	701

MC	BN	TOTAL	V O M I T ONSET	V O M I T DUR	DIARRHEA ONSET	DIARRHEA DUR	BOIA ONSET	MALS ANOR	GING ONSET	PHAR DUR	NGEP ONSET	PURP / PET ONSET	PET DUR	SCALP PRCNT	EPIL ONSET	REPRO ABNCR	FEVER ONSET	MAJOR COMPL	RBC LWST	HEMO LWST	WBC LWST	HCSP DISC
SV	N	228	70	70	91	91	15	128	69	69	3	35	35	63	63	54	68	82	70	90	105	14
			226	226	228	228	224	228	228	228	223	227	227	228	228	228	228	228	70	90	105	130
SV	LT	3	2	2	1	1	0	2	1	1	0	2	2	2	2	1	1	1	2	2	2	0
			3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	1
SV	MD	25	10	10	10	10	4	22	7	7	0	5	5	9	9	3	13	11	10	15	17	1
			25	25	25	25	25	25	25	25	25	25	25	25	25	25	24	25	10	15	17	8
SV	SV	10	3	3	4	4	2	7	6	6	2	1	1	7	7	5	6	6	8	9	9	0
			10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	8	9	9	1
SV	TL	266	85	85	106	106	21	159	83	83	5	43	43	81	81	63	88	100	90	116	133	15
			264	264	266	266	266	266	266	266	261	265	265	266	266	266	265	266	90	116	133	147
TL	N	4394	621	621	1231	1229	268	965	698	698	26	384	384	546	544	686	798	841	411	491	591	40
			4362	4362	4361	4360	4361	2904	4365	4365	4180	4367	4367	4352	4352	2936	4362	3204	411	493	591	2758
TL	LT	49	16	16	24	24	1	25	14	14	1	8	8	15	15	9	15	15	18	19	22	3
			48	48	49	49	49	49	49	49	48	48	48	49	49	49	49	49	18	19	22	31
TL	MD	465	113	113	167	167	40	159	121	121	7	71	71	125	125	68	153	151	83	107	123	11
			460	460	462	462	462	288	462	462	426	61	461	455	455	291	456	354	83	107	123	183
TL	SV	142	40	40	53	53	5	78	38	38	2	12	12	54	53	32	55	58	59	68	68	10
			142	142	142	142	142	142	142	142	141	142	142	142	141	142	142	142	59	68	68	88
TL	TL	5050	790	790	1475	1473	314	1227	871	871	36	475	475	740	737	795	1021	1065	571	685	804	64
			5012	5012	5014	5013	5014	3383	5018	5018	4795	5018	5018	4998	4997	3418	5009	3749	571	687	804	3060

APPENDIX C

HIROSHIMA BURN AND MECHANICAL INJURIES RADIATION SYMPTOMS

(All thermal, radiation, and pressure calculations used old weapon yields relative to T65 radiation data.)

Hiroshima - Outside Unshielded

MAR 27, 1984 SYMPTOMS HIROSHIMA - OUTSIDE UNSHIELDED LOW RADIATION TOTAL CASES: 321
NO BURNS NO MECH

CAL/CM2	VOMITING FIRST DAY			VOMITING 1 TO 5 DAYS			VOMITING AFTER 5 DAYS			DIARRHEA-1 TO 7 DAYS			DIARRHEA AFTER 7 DAYS		
	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT
0.0- 0.5	0	11	0.0	0	11	0.0	0	11	0.0	2	11	18.2	1	11	9.1
0.5- 1.0	0	26	0.0	0	26	0.0	1	26	3.8	1	26	3.8	4	26	15.4
1.0- 1.5	0	51	0.0	0	51	0.0	0	51	0.0	5	51	9.8	8	51	15.7
1.5- 2.0	1	26	3.8	1	26	3.8	1	26	3.8	1	26	3.8	1	26	3.8
2.0- 2.5	1	39	2.6	1	39	2.6	1	39	2.6	4	39	10.3	7	39	17.9
2.5- 3.0	0	14	0.0	0	14	0.0	0	14	0.0	0	14	0.0	0	14	0.0
3.0- 3.5	0	8	0.0	0	8	0.0	0	8	0.0	2	8	25.0	1	8	12.5
3.5- 4.0	0	21	0.0	1	21	4.8	0	21	0.0	2	21	9.5	3	21	14.3
4.0- 4.5	0	9	0.0	0	9	0.0	0	9	0.0	2	10	20.0	2	10	20.0
4.5- 5.0	0	7	0.0	0	7	0.0	0	7	0.0	1	8	12.5	1	8	12.5
5.0- 5.5	0	7	0.0	0	7	0.0	0	7	0.0	0	7	0.0	0	7	0.0
5.5- 6.0	0	7	0.0	0	7	0.0	0	7	0.0	0	7	0.0	2	7	28.6
6.0- 7.0	0	8	0.0	0	8	0.0	2	8	25.0	0	8	0.0	3	8	37.5
7.0- 8.0	0	20	0.0	0	20	0.0	0	20	0.0	0	20	0.0	4	20	20.0
8.0- 10.0	1	33	3.0	2	33	6.1	0	33	0.0	2	33	6.1	4	33	12.1
10.0- 12.0	2	30	6.7	2	30	6.7	0	30	0.0	2	32	6.3	4	32	12.5
TOTALS:	5	317		7	317		5	317		24	321		45	321	

CAL/CM2	PURPURA/PETECHIAE			SCALP EPILATION			REPRODUCTIVE PROB-FEM			REPRODUCTIVE PROB-MALE		
0.0- 0.5	0	11	0.0	0	11	0.0	1	2	50.0	0	6	0.0
0.5- 1.0	3	26	11.5	0	26	0.0	3	13	23.1	0	13	0.0
1.0- 1.5	0	51	0.0	0	51	0.0	4	12	33.3	1	38	2.6
1.5- 2.0	0	26	0.0	0	26	0.0	8	14	57.1	0	11	0.0
2.0- 2.5	1	39	2.6	1	39	2.6	10	16	62.5	0	22	0.0
2.5- 3.0	0	14	0.0	0	14	0.0	3	7	42.9	0	7	0.0
3.0- 3.5	0	8	0.0	1	8	12.5	2	7	28.6	0	1	0.0
3.5- 4.0	0	21	0.0	1	21	4.8	7	14	50.0	0	6	0.0
4.0- 4.5	0	10	0.0	1	10	10.0	1	5	20.0	0	5	0.0
4.5- 5.0	1	8	12.5	1	8	12.5	1	4	25.0	0	3	0.0
5.0- 5.5	1	7	14.3	0	7	0.0	2	3	66.7	0	3	0.0
5.5- 6.0	0	7	0.0	0	7	0.0	2	4	50.0	0	1	0.0
6.0- 7.0	1	8	12.5	1	8	12.5	0	3	0.0	0	1	0.0
7.0- 8.0	0	20	0.0	2	20	10.0	0	2	0.0	0	8	0.0
8.0- 10.0	2	33	6.1	3	33	9.1	2	8	25.0	0	5	0.0
10.0- 12.0	2	32	6.3	2	32	6.3	2	3	66.7	2	5	40.0
TOTALS:	11	321		13	321		48	117		3	135	

MAR 27, 1984 SYMPTOMS HIROSHIMA - OUTSIDE UNSHIELDED LOW RADIATION TOTAL CASES: 75
NO BURNS MOD MECH

CAL/CM2	VOMITING FIRST DAY			VOMITING 1 TO 5 DAYS			VOMITING AFTER 5 DAYS			DIARRHEA-1 TO 7 DAYS			DIARRHEA AFTER 7 DAYS		
	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT
0.0- 0.5	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	3	0.0	0	3	0.0	0	3	0.0	1	3	33.3	1	3	33.3
1.5- 2.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0
2.0- 2.5	0	5	0.0	0	5	0.0	0	5	0.0	1	5	20.0	0	5	0.0
2.5- 3.0	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0	2	3	66.7
3.0- 3.5	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0
3.5- 4.0	0	2	0.0	0	2	0.0	0	2	0.0	1	2	50.0	0	2	0.0
4.0- 4.5	0	3	0.0	0	3	0.0	0	3	0.0	1	3	33.3	1	3	33.3
4.5- 5.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0
5.0- 5.5	0	4	0.0	0	4	0.0	0	4	0.0	0	4	0.0	1	4	25.0
5.5- 6.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0
6.0- 7.0	1	4	25.0	1	4	25.0	0	4	0.0	0	4	0.0	0	4	0.0
7.0- 8.0	0	10	0.0	0	10	0.0	0	10	0.0	0	10	0.0	2	10	20.0
8.0- 10.0	0	17	0.0	0	17	0.0	1	17	5.9	1	18	5.6	5	18	27.8
10.0- 12.0	0	13	0.0	0	13	0.0	1	13	7.7	0	13	0.0	3	13	23.1
TOTALS:	1	74		1	74		2	74		5	75		15	75	

CAL/CM2	PURPURA/PETECHIAE			SCALP EPILATION			REPRODUCTIVE PROB-FEM			REPRODUCTIVE PROB-MALE		
0.0- 0.5	0	1	0.0	0	1	0.0	0	0	*****	0	1	0.0
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	3	0.0	0	3	0.0	0	1	0.0	0	2	0.0
1.5- 2.0	0	2	0.0	0	2	0.0	2	2	100.0	0	0	*****
2.0- 2.5	0	5	0.0	0	5	0.0	2	3	66.7	0	2	0.0
2.5- 3.0	0	3	0.0	1	3	33.3	1	2	50.0	0	1	0.0
3.0- 3.5	0	3	0.0	0	3	0.0	0	1	0.0	0	2	0.0
3.5- 4.0	0	2	0.0	0	2	0.0	0	2	0.0	0	0	*****
4.0- 4.5	0	3	0.0	0	3	0.0	0	1	0.0	0	2	0.0
4.5- 5.0	0	2	0.0	0	2	0.0	0	1	0.0	0	1	0.0
5.0- 5.5	0	4	0.0	0	4	0.0	2	3	66.7	0	1	0.0
5.5- 6.0	0	2	0.0	0	2	0.0	0	2	0.0	0	0	*****
6.0- 7.0	1	4	25.0	1	4	25.0	0	1	0.0	1	3	33.3
7.0- 8.0	0	10	0.0	1	9	11.1	1	2	50.0	0	3	0.0
8.0- 10.0	1	18	5.6	4	18	22.2	1	4	25.0	0	8	0.0
10.0- 12.0	1	13	7.7	2	13	15.4	0	3	0.0	0	2	0.0
TOTALS:	3	75		9	74		9	28		1	28	

MAR 27, 1984 SYMPTOMS HIROSHIMA - OUTSIDE UNSHIELDED LOW RADIATION TOTAL CASES: 9
NO BURNS SVR MECH

CAL/CM2	VOMITING FIRST DAY			VOMITING 1 TO 5 DAYS			VOMITING AFTER 5 DAYS			DIARRHEA-1 TO 7 DAYS			DIARRHEA AFTER 7 DAYS		
	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.0- 3.5	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
3.5- 4.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.0- 4.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.5- 5.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
5.0- 5.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
5.5- 6.0	1	2	50.0	1	2	50.0	0	2	0.0	1	2	50.0	0	2	0.0
6.0- 7.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
7.0- 8.0	0	3	0.0	1	3	33.3	0	3	0.0	2	3	66.7	0	3	0.0
8.0- 10.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
10.0- 12.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0	1	2	50.0
TOTALS:	1	9		2	9		0	9		3	9		1	9	

CAL/CM2	PURPURA/PETECHIAE			SCALP EPILATION			REPRODUCTIVE PROB-FEM			REPRODUCTIVE PROB-MALE		
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.0- 3.5	0	1	0.0	1	1	100.0	0	1	0.0	0	0	*****
3.5- 4.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.0- 4.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.5- 5.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
5.0- 5.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
5.5- 6.0	0	2	0.0	1	2	50.0	0	1	0.0	0	0	*****
6.0- 7.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
7.0- 8.0	0	3	0.0	0	3	0.0	0	0	*****	1	2	50.0
8.0- 10.0	0	1	0.0	0	1	0.0	1	1	100.0	0	0	*****
10.0- 12.0	0	2	0.0	0	2	0.0	1	1	100.0	0	1	0.0
TOTALS:	0	9		2	9		2	4		1	3	

MAR 27, 1984 SYMPTOMS HIROSHIMA - OUTSIDE UNSHIELDED LOW RADIATION TOTAL CASES: 955
MOD BURNS NO MECH

CAL/CM2	VOMITING FIRST DAY			VOMITING 1 TO 5 DAYS			VOMITING AFTER 5 DAYS			DIARRHEA-1 TO 7 DAYS			DIARRHEA AFTER 7 DAYS		
	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT
0.0- 0.5	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	1	1	100.0
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	1	10	10.0	1	10	10.0	0	10	0.0	0	10	0.0	2	10	20.0
1.5- 2.0	0	15	0.0	0	15	0.0	1	15	6.7	2	15	13.3	4	15	26.7
2.0- 2.5	1	18	5.6	1	18	5.6	0	18	0.0	3	18	16.7	2	18	11.1
2.5- 3.0		7	0.0	0	7	0.0	0	7	0.0	0	7	0.0	0	7	0.0
3.0- 3.5	0	10	0.0	1	10	10.0	1	10	10.0	1	10	10.0	1	10	10.0
3.5- 4.0	0	23	0.0	0	23	0.0	0	23	0.0	4	23	17.4	5	23	21.7
4.0- 4.5	2	30	6.7	2	30	6.7	0	30	0.0	5	33	15.2	1	33	3.0
4.5- 5.0	0	16	0.0	1	16	6.3	0	16	0.0	5	16	31.3	2	16	12.5
5.0- 5.5	0	45	0.0	1	45	2.2	0	45	0.0	4	45	8.9	4	45	8.9
5.5- 6.0	2	41	4.9	3	41	7.3	1	41	2.4	6	43	14.0	4	43	9.3
6.0- 7.0	1	28	3.6	1	28	3.6	1	28	3.6	2	28	7.1	6	28	21.4
7.0- 8.0	3	99	3.0	5	99	5.1	2	99	2.0	5	100	5.0	17	100	17.0
8.0- 10.0	10	256	3.9	11	256	4.3	11	256	4.3	13	262	5.0	42	262	16.0
10.0- 12.0	37	320	11.6	49	320	15.3	25	320	7.8	32	331	9.7	67	331	20.2
TOTALS:	57	919		76	919		42	919		82	942		158	942	

CAL/CM2	PURPURA/PETECHIAE			SCALP EPILATION			REPRODUCTIVE PROB-FEM			REPRODUCTIVE PROB-MALE		
0.0- 0.5	0	1	0.0	0	1	0.0	0	0	*****	0	1	0.0
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	10	0.0	0	10	0.0	0	1	0.0	0	9	0.0
1.5- 2.0	0	15	0.0	0	15	0.0	1	8	12.5	0	6	0.0
2.0- 2.5	0	18	0.0	0	18	0.0	4	9	44.4	0	9	0.0
2.5- 3.0	0	7	0.0	0	7	0.0	1	4	25.0	0	3	0.0
3.0- 3.5	0	10	0.0	0	10	0.0	3	4	75.0	0	5	0.0
3.5- 4.0	1	23	4.3	0	23	0.0	4	10	40.0	1	13	7.7
4.0- 4.5	2	33	6.1	8	33	24.2	5	9	55.6	0	21	0.0
4.5- 5.0	0	16	0.0	1	16	6.3	2	8	25.0	0	5	0.0
5.0- 5.5	1	45	2.2	1	45	2.2	5	21	23.8	1	24	4.2
5.5- 6.0	0	43	0.0	7	42	16.7	5	13	38.5	1	23	4.3
6.0- 7.0	1	28	3.6	3	27	11.1	3	8	37.5	0	12	0.0
7.0- 8.0	2	103	1.9	20	103	19.4	7	16	43.8	0	39	0.0
8.0- 10.0	9	265	3.4	47	262	17.9	24	57	42.1	4	79	5.1
10.0- 12.0	21	333	6.3	86	333	25.8	25	73	34.2	2	25	8.0
TOTALS:	37	950		173	945		89	241		9	274	

MAR 27, 1984 SYMPTOMS HIROSHIMA - OUTSIDE UNSHIELDED LOW RADIATION TOTAL CASES: 131
MOD BURNS MOD MECH

CAL/CM2	VOMITING FIRST DAY			VOMITING 1 TO 5 DAYS			VOMITING AFTER 5 DAYS			DIARRHEA-1 TO 7 DAYS			DIARRHEA AFTER 7 DAYS		
	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	1	1	100.0	1	1	100.0	0	1	0.0	0	1	0.0	0	1	0.0
3.0- 3.5	0	1	0.0	1	1	100.0	0	1	0.0	0	2	0.0	0	2	0.0
3.5- 4.0	0	4	0.0	0	4	0.0	0	4	0.0	2	4	50.0	0	4	0.0
4.0- 4.5	0	0	*****	0	0	*****	0	0	*****	0	1	0.0	0	1	0.0
4.5- 5.0	0	3	0.0	1	3	33.3	0	3	0.0	1	3	33.3	2	3	66.7
5.0- 5.5	1	7	14.3	1	7	14.3	0	7	0.0	2	7	28.6	0	7	0.0
5.5- 6.0	1	7	14.3	1	7	14.3	0	7	0.0	1	7	14.3	0	7	0.0
6.0- 7.0	0	2	0.0	0	2	0.0	1	2	50.0	0	3	0.0	1	3	33.3
7.0- 8.0	1	16	6.3	1	16	6.3	1	16	6.3	1	16	6.3	4	16	25.0
8.0- 10.0	2	39	5.1	2	39	5.1	1	39	2.6	2	40	5.0	12	40	30.0
10.0- 12.0	3	45	6.7	5	45	11.1	3	45	6.7	7	46	15.2	14	46	30.4
TOTALS:	9	125		13	125		6	125		16	130		33	130	

CAL/CM2	PURPURA/PETECHIAE			SCALP EPILATION			REPRODUCTIVE PROB-FEM			REPRODUCTIVE PROB-MALE		
	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	0	1	0.0	0	1	0.0	0	0	*****	0	1	0.0
3.0- 3.5	0	2	0.0	0	2	0.0	0	0	*****	0	1	0.0
3.5- 4.0	0	4	0.0	1	4	25.0	0	1	0.0	1	3	33.3
4.0- 4.5	1	1	100.0	1	1	100.0	0	0	*****	0	0	*****
4.5- 5.0	0	3	0.0	2	3	66.7	0	2	0.0	0	1	0.0
5.0- 5.5	0	7	0.0	1	7	14.3	3	5	60.0	0	0	*****
5.5- 6.0	1	7	14.3	2	7	28.6	1	2	50.0	2	4	50.0
6.0- 7.0	1	3	33.3	1	3	33.3	0	0	*****	0	1	0.0
7.0- 8.0	1	16	6.3	3	16	18.8	0	4	0.0	0	4	0.0
8.0- 10.0	3	41	7.3	10	41	24.4	4	7	57.1	1	11	9.1
10.0- 12.0	4	45	8.9	16	45	35.6	3	9	33.3	0	5	0.0
TOTALS:	11	130		37	130		11	30		4	31	

MAR 27, 1984 SYMPTOMS HIROSHIMA - OUTSIDE UNSHIELDED LOW RADIATION TOTAL CASES: 10
MOD BURNS SVR MECH

CAL/CM2	VOMITING FIRST DAY			VOMITING 1 TO 5 DAYS			VOMITING AFTER 5 DAYS			DIARRHEA-1 TO 7 DAYS			DIARRHEA AFTER 7 DAYS		
	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.0- 3.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.5- 4.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.0- 4.5	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
4.5- 5.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
5.0- 5.5	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
5.5- 6.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
6.0- 7.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0	1	2	50.0
7.0- 8.0	1	1	100.0	1	1	100.0	0	1	0.0	0	1	0.0	0	1	0.0
8.0- 10.0	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0
10.0- 12.0	0	2	0.0	0	2	0.0	0	2	0.0	1	2	50.0	0	2	0.0
TOTALS:	1	10		1	10		0	10		1	10		1	10	

CAL/CM2	PURPURA/PETECHIAE			SCALP EPILATION			REPRODUCTIVE PROB-FEM			REPRODUCTIVE PROB-MALE		
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.0- 3.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.5- 4.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.0- 4.5	1	1	100.0	0	1	0.0	0	0	*****	0	1	0.0
4.5- 5.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
5.0- 5.5	0	1	0.0	0	1	0.0	0	0	*****	0	1	0.0
5.5- 6.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
6.0- 7.0	0	2	0.0	1	2	50.0	2	2	100.0	0	0	*****
7.0- 8.0	0	1	0.0	1	1	100.0	1	1	100.0	0	0	*****
8.0- 10.0	0	3	0.0	1	3	33.3	1	2	50.0	0	0	*****
10.0- 12.0	0	2	0.0	0	2	0.0	0	0	*****	0	2	0.0
TOTALS:	1	10		3	10		4	5		0	4	

MAR 27, 1984 SYMPTOMS HIROSHIMA - OUTSIDE UNSHIELDED LOW RADIATION TOTAL CASES: 10
MOD BURNS SVR MECH

CAL/CM2	VOMITING FIRST DAY CASES	TOTAL	PERCENT	VOMITING 1 TO 5 DAYS CASES	TOTAL	PERCENT	VOMITING AFTER 5 DAYS CASES	TOTAL	PERCENT	DIARRHEA-1 TO 7 DAYS CASES	TOTAL	PERCENT	DIARRHEA AFTER 7 DAYS CASES	TOTAL	PERCENT
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.0- 3.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.5- 4.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.0- 4.5	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
4.5- 5.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
5.0- 5.5	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
5.5- 6.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
6.0- 7.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0	1	2	50.0
7.0- 8.0	1	1	100.0	1	1	100.0	0	1	0.0	0	1	0.0	0	1	0.0
8.0- 10.0	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0
10.0- 12.0	0	2	0.0	0	2	0.0	0	2	0.0	1	2	50.0	0	2	0.0
TOTALS:	1	10		1	10		0	10		1	10		1	10	

CAL/CM2	PURPURA/PETECHIAE			SCALP EPILATION			REPRODUCTIVE PROB-FEM			REPRODUCTIVE PROB-MALE		
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.0- 3.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.5- 4.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.0- 4.5	1	1	100.0	0	1	0.0	0	0	*****	0	1	0.0
4.5- 5.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
5.0- 5.5	0	1	0.0	0	1	0.0	0	0	*****	0	1	0.0
5.5- 6.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
6.0- 7.0	0	2	0.0	1	2	50.0	2	2	100.0	0	0	*****
7.0- 8.0	0	1	0.0	1	1	100.0	1	1	100.0	0	0	*****
8.0- 10.0	0	3	0.0	1	3	33.3	1	2	50.0	0	0	*****
10.0- 12.0	0	2	0.0	0	2	0.0	0	0	*****	0	2	0.0
TOTALS:	1	10		3	10		4	5		0	4	

MAR 27, 1984 SYMPTOMS HIROSHIMA - OUTSIDE UNSHIELDED LOW RADIATION TOTAL CASES: 760
SVR BURNS NO MECH

CAL/CM2	VOMITING FIRST DAY			VOMITING 1 TO 5 DAYS			VOMITING AFTER 5 DAYS			DIAPRHEA-1 TO 7 DAYS			DIARRHEA AFTER 7 DAYS		
	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
1.5- 2.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
2.0- 2.5	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0
2.5- 3.0	1	5	20.0	1	5	20.0	0	5	0.0	1	5	20.0	2	5	40.0
3.0- 3.5	0	8	0.0	1	8	12.5	0	8	0.0	1	8	12.5	0	8	0.0
3.5- 4.0	5	26	19.2	5	26	19.2	0	26	0.0	7	28	25.0	4	28	14.3
4.0- 4.5	2	25	8.0	4	25	16.0	0	25	0.0	2	25	8.0	4	25	16.0
4.5- 5.0	3	28	10.7	4	28	14.3	1	28	3.6	1	28	3.6	9	28	32.1
5.0- 5.5	7	100	7.0	8	100	8.0	2	100	2.0	14	100	14.0	14	100	14.0
5.5- 6.0	5	70	7.1	6	70	8.6	3	70	4.3	7	70	10.0	10	70	14.3
6.0- 7.0	2	50	4.0	3	50	6.0	4	50	8.0	5	50	10.0	7	50	14.0
7.0- 8.0	6	75	8.0	6	75	8.0	2	75	2.7	9	76	11.8	12	76	15.8
8.0- 10.0	28	238	11.8	33	238	13.9	12	238	5.0	20	240	8.3	56	240	23.3
10.0- 12.0	10	112	8.9	11	112	9.8	3	112	2.7	11	113	9.7	15	113	13.3
TOTALS:	69	742		82	742		27	742		78	748		133	748	

CAL/CM2	PURPURA/PETECHIAE			SCALP EPILATION			REPRODUCTIVE PROB-FEM			REPRODUCTIVE PROB-MALE		
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	1	0.0	0	1	0.0	0	0	*****	0	1	0.0
1.5- 2.0	0	1	0.0	0	1	0.0	0	0	*****	0	1	0.0
2.0- 2.5	1	3	33.3	0	3	0.0	1	2	50.0	0	1	0.0
2.5- 3.0	0	5	0.0	0	5	0.0	1	1	100.0	0	4	0.0
3.0- 3.5	0	8	0.0	1	8	12.5	2	5	40.0	0	3	0.0
3.5- 4.0	0	28	0.0	3	28	10.7	5	16	31.3	1	12	8.3
4.0- 4.5	2	25	8.0	2	25	8.0	5	11	45.5	2	14	14.3
4.5- 5.0	0	28	0.0	3	28	10.7	10	17	58.8	0	12	0.0
5.0- 5.5	0	100	0.0	8	100	8.0	17	54	31.5	9	43	20.9
5.5- 6.0	1	70	1.4	6	70	8.6	21	43	48.8	4	26	15.4
6.0- 7.0	1	50	2.0	5	50	10.0	8	17	47.1	2	25	8.0
7.0- 8.0	1	76	1.3	12	76	15.8	15	19	78.9	3	37	8.1
8.0- 10.0	8	243	3.3	52	243	21.4	44	86	51.2	9	88	10.2
10.0- 12.0	5	114	4.4	33	114	28.9	20	39	51.3	6	35	17.1
TOTALS:	19	752		125	752		149	310		36	302	

MAR 27, 1984 SYMPTOMS HIROSHIMA - OUTSIDE UNSHIELDED LOW RADIATION TOTAL CASES: 75
SVR BURNS MOD MECH

CAL/CM2	VOMITING FIRST DAY			VOMITING 1 TO 5 DAYS			VOMITING AFTER 5 DAYS			DIARRHEA-1 TO 7 DAYS			DIARRHEA AFTER 7 DAYS		
	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.0- 3.5	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0
3.5- 4.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
4.0- 4.5	0	5	0.0	0	5	0.0	0	5	0.0	0	5	0.0	0	5	0.0
4.5- 5.0	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0
5.0- 5.5	3	16	18.8	3	16	18.8	0	16	0.0	2	16	12.5	2	16	12.5
5.5- 6.0	0	9	0.0	0	9	0.0	1	9	11.1	1	9	11.1	1	9	11.1
6.0- 7.0	0	3	0.0	0	3	0.0	0	3	0.0	1	3	33.3	0	3	0.0
7.0- 8.0	0	2	0.0	0	2	0.0	0	2	0.0	1	2	50.0	0	2	0.0
8.0- 10.0	3	23	13.0	3	23	13.0	0	23	0.0	3	23	13.0	5	23	21.7
10.0- 12.0	2	11	18.2	2	11	18.2	1	11	9.1	1	10	10.0	4	10	40.0
TOTALS:	8	75		8	75		2	75		9	74		12	74	

CAL/CM2	PURPURA/PETECHIAE			SCALP EPILATION			REPRODUCTIVE PROB-FEM			REPRODUCTIVE PROB-MALE		
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.0- 3.5	0	2	0.0	1	2	50.0	0	0	*****	0	2	0.0
3.5- 4.0	0	1	0.0	0	1	0.0	0	0	*****	0	1	0.0
4.0- 4.5	0	5	0.0	2	5	40.0	1	2	50.0	0	2	0.0
4.5- 5.0	0	3	0.0	0	3	0.0	1	2	50.0	0	1	0.0
5.0- 5.5	0	16	0.0	0	16	0.0	2	8	25.0	1	8	12.5
5.5- 6.0	0	9	0.0	1	9	11.1	1	4	25.0	0	5	0.0
6.0- 7.0	1	3	33.3	1	3	33.3	1	1	100.0	0	1	0.0
7.0- 8.0	0	2	0.0	0	2	0.0	0	1	0.0	0	1	0.0
8.0- 10.0	2	23	8.7	5	23	21.7	4	5	80.0	0	10	0.0
10.0- 12.0	0	11	0.0	5	11	45.5	2	4	50.0	1	2	50.0
TOTALS:	3	75		15	75		12	27		2	33	

MAR 27, 1984

SYMPTOMS HIROSHIMA - OUTSIDE UNSHIELDED LOW RADIATION TOTAL CASES: 5
SVR BURNS SVR MECH

CAL/CM2	VOMITING FIRST DAY			VOMITING 1 TO 5 DAYS			VOMITING AFTER 5 DAYS			DIARRHEA-1 TO 7 DAYS			DIARRHEA AFTER 7 DAYS		
	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.0- 3.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.5- 4.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.0- 4.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.5- 5.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
5.0- 5.5	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	1	1	100.0
5.5- 6.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
6.0- 7.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
7.0- 8.0	1	2	50.0	1	2	50.0	0	2	0.0	0	2	0.0	1	2	50.0
8.0- 10.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0	1	2	50.0
10.0- 12.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
TOTALS:	1	5		1	5		0	5		0	5		3	5	

CAL/CM2	PURPURA/PETECHIAE			SCALP EPILATION			REPRODUCTIVE PROB-FEM			REPRODUCTIVE PROB-MALE		
	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.0- 3.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.5- 4.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.0- 4.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.5- 5.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
5.0- 5.5	0	1	0.0	1	1	100.0	0	0	*****	0	0	*****
5.5- 6.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
6.0- 7.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
7.0- 8.0	0	2	0.0	0	2	0.0	0	1	0.0	0	1	0.0
8.0- 10.0	0	2	0.0	0	2	0.0	1	1	100.0	0	1	0.0
10.0- 12.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
TOTALS:	0	5		1	5		1	2		0	2	

MAR 27, 1984 SYMPTOMS HIROSHIMA - OUTSIDE UNSHIELDED ALL RADIATION TOTAL CASES: 384
NO BURNS NO MECH

CAL/CM2	VOMITING FIRST DAY CASES	TOTAL	PERCENT	VOMITING 1 TO 5 DAYS CASES	TOTAL	PERCENT	VOMITING AFTER 5 DAYS CASES	TOTAL	PERCENT	DIARRHEA-1 TO 7 DAYS CASES	TOTAL	PERCENT	DIARRHEA AFTER 7 DAYS CASES	TOTAL	PERCENT
0.0- 0.5	0	11	0.0	0	11	0.0	0	11	0.0	2	11	18.2	1	11	9.1
0.5- 1.0	0	26	0.0	0	26	0.0	1	26	3.8	1	26	3.8	4	26	15.4
1.0- 1.5	0	51	0.0	0	51	0.0	0	51	0.0	5	51	9.8	8	51	15.7
1.5- 2.0	1	26	3.8	1	26	3.8	1	26	3.8	1	26	3.8	1	26	3.8
2.0- 2.5	1	39	2.6	1	39	2.6	1	39	2.6	4	39	10.3	7	39	17.9
2.5- 3.0	0	14	0.0	0	14	0.0	0	14	0.0	0	14	0.0	0	14	0.0
3.0- 3.5	0	8	0.0	0	8	0.0	0	8	0.0	2	8	25.0	1	8	12.5
3.5- 4.0	0	21	0.0	1	21	4.8	0	21	0.0	2	21	9.5	3	21	14.3
4.0- 4.5	0	9	0.0	0	9	0.0	0	9	0.0	2	10	20.0	2	10	20.0
4.5- 5.0	0	7	0.0	0	7	0.0	0	7	0.0	1	8	12.5	1	8	12.5
5.0- 5.5	0	7	0.0	0	7	0.0	0	7	0.0	0	7	0.0	0	7	0.0
5.5- 6.0	0	7	0.0	0	7	0.0	0	7	0.0	0	7	0.0	2	7	28.6
6.0- 7.0	0	8	0.0	0	8	0.0	2	8	25.0	0	8	0.0	3	8	37.5
7.0- 8.0	0	20	0.0	0	20	0.0	0	20	0.0	0	20	0.0	4	20	20.0
8.0- 10.0	1	33	3.0	2	33	6.1	0	33	0.0	2	33	6.1	4	33	12.1
10.0- 12.0	2	31	6.5	2	31	6.5	0	31	0.0	2	33	6.1	4	33	12.1
12.0- 14.0	2	9	22.2	2	9	22.2	0	9	0.0	0	9	0.0	1	9	11.1
14.0- 16.0	0	14	0.0	0	14	0.0	1	14	7.1	1	15	6.7	3	15	20.0
16.0- 18.0	1	10	10.0	1	10	10.0	0	10	0.0	1	10	10.0	3	10	30.0
18.0- 20.0	1	11	9.1	1	11	9.1	1	11	9.1	0	11	0.0	3	11	27.3
20.0- 25.0	1	4	25.0	1	4	25.0	0	4	0.0	1	4	25.0	1	4	25.0
25.0- 30.0	0	7	0.0	1	7	14.3	0	7	0.0	2	7	28.6	2	7	28.6
30.0- 40.0	2	5	40.0	2	5	40.0	0	5	0.0	0	5	0.0	1	5	20.0
40.0- 50.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
50.0- 60.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
60.0- 80.0	1	1	100.0	1	1	100.0	0	1	0.0	0	1	0.0	0	1	0.0
80.0-100.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
TOTALS:	13	379		16	379		7	379		29	384		59	384	

CAL/CM2	PURPURA/PETECHIAE			SCALP EPILATION			REPRODUCTIVE PROB-FEM			REPRODUCTIVE PROB-MALE		
0.0- 0.5	0	11	0.0	0	11	0.0	1	2	50.0	0	6	0.0
0.5- 1.0	3	26	11.5	0	26	0.0	3	13	23.1	0	13	0.0
1.0- 1.5	0	51	0.0	0	51	0.0	4	12	33.3	1	38	2.6
1.5- 2.0	0	26	0.0	0	26	0.0	8	14	57.1	0	11	0.0
2.0- 2.5	1	39	2.6	1	39	2.6	10	16	62.5	0	22	0.0
2.5- 3.0	0	14	0.0	0	14	0.0	3	7	42.9	0	7	0.0
3.0- 3.5	0	8	0.0	1	8	12.5	2	7	28.6	0	1	0.0
3.5- 4.0	0	21	0.0	1	21	4.8	7	14	50.0	0	6	0.0
4.0- 4.5	0	10	0.0	1	10	10.0	1	5	20.0	0	5	0.0
4.5- 5.0	1	8	12.5	1	8	12.5	1	4	25.0	0	3	0.0
5.0- 5.5	1	7	14.3	0	7	0.0	2	3	66.7	0	3	0.0
5.5- 6.0	0	7	0.0	0	7	0.0	2	4	50.0	0	1	0.0
6.0- 7.0	1	8	12.5	1	8	12.5	0	3	0.0	0	1	0.0
7.0- 8.0	0	20	0.0	2	20	10.0	0	2	0.0	0	8	0.0
8.0- 10.0	2	33	6.1	3	33	9.1	2	8	25.0	0	5	0.0
10.0- 12.0	2	33	6.1	2	33	6.1	2	3	66.7	2	5	40.0
12.0- 14.0	2	9	22.2	0	9	0.0	0	1	0.0	0	1	0.0
14.0- 16.0	1	15	6.7	1	15	6.7	1	2	50.0	0	2	0.0
16.0- 18.0	1	10	10.0	4	10	40.0	1	1	100.0	0	2	0.0
18.0- 20.0	4	11	36.4	4	11	36.4	2	3	66.7	0	1	0.0
20.0- 25.0	2	4	50.0	2	4	50.0	0	1	0.0	0	0	*****
25.0- 30.0	4	7	57.1	4	7	57.1	0	2	0.0	1	3	33.3
30.0- 40.0	2	5	40.0	4	5	80.0	1	2	50.0	0	2	0.0
40.0- 50.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
50.0- 60.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
60.0- 80.0	1	1	100.0	0	1	0.0	1	1	100.0	0	0	*****
80.0-100.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
TOTALS:	28	384		32	384		54	130		4	146	

MAR 27, 1984 SYMPTOMS HIROSHIMA - OUTSIDE UNSHIELDED ALL RADIATION TOTAL CASES: 125
NO BURNS MOD TECH

CAL/CM2	VOMITING FIRST DAY CASES	TOTAL	PERCENT	VOMITING 1 TO 5 DAYS CASES	TOTAL	PERCENT	VOMITING AFTER 5 DAYS CASES	TOTAL	PERCENT	DIARRHEA-1 TO 7 DAYS CASES	TOTAL	PERCENT	DIARRHEA AFTER 7 DAYS CASES	TOTAL	PERCENT
0.0- 0.5	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	3	0.0	0	3	0.0	0	3	0.0	1	3	33.3	1	3	33.3
1.5- 2.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0
2.0- 2.5	0	5	0.0	0	5	0.0	0	5	0.0	1	5	20.0	0	5	0.0
2.5- 3.0	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0	2	3	66.7
3.0- 3.5	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0
3.5- 4.0	0	2	0.0	0	2	0.0	0	2	0.0	1	2	50.0	0	2	0.0
4.0- 4.5	0	3	0.0	0	3	0.0	0	3	0.0	1	3	33.3	1	3	33.3
4.5- 5.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0
5.0- 5.5	0	4	0.0	0	4	0.0	0	4	0.0	0	4	0.0	1	4	25.0
5.5- 6.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0
6.0- 7.0	1	4	25.0	1	4	25.0	0	4	0.0	0	4	0.0	0	4	0.0
7.0- 8.0	0	10	0.0	0	10	0.0	0	10	0.0	0	10	0.0	2	10	20.0
8.0- 10.0	0	17	0.0	0	17	0.0	1	17	5.9	1	18	5.6	5	18	27.8
10.0- 12.0	0	13	0.0	0	13	0.0	1	13	7.7	0	13	0.0	3	13	23.1
12.0- 14.0	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0
14.0- 16.0	0	13	0.0	1	13	7.7	1	13	7.7	0	14	0.0	3	14	21.4
16.0- 18.0	2	6	33.3	2	6	33.3	1	6	16.7	2	6	33.3	3	6	50.0
18.0- 20.0	1	6	16.7	1	6	16.7	1	6	16.7	1	7	14.3	0	7	0.0
20.0- 25.0	1	7	14.3	1	7	14.3	1	7	14.3	0	7	0.0	4	7	57.1
25.0- 30.0	3	6	50.0	3	6	50.0	0	6	0.0	0	7	0.0	1	7	14.3
30.0- 40.0	2	3	66.7	2	3	66.7	0	3	0.0	0	3	0.0	1	3	33.3
40.0- 50.0	1	2	50.0	2	2	100.0	0	2	0.0	0	2	100.0	0	2	0.0
50.0- 65.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
65.0- 80.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
80.0-100.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
TOTALS:	11	121		13	121		6	121		10	125		27	125	

CAL/CM2	PURPURA/PETECHIAE CASES	TOTAL	PERCENT	SCALP EPILATION CASES	TOTAL	PERCENT	REPRODUCTIVE PROB-FEM CASES	TOTAL	PERCENT	REPRODUCTIVE PROB-MALE CASES	TOTAL	PERCENT
0.0- 0.5	0	1	0.0	0	1	0.0	0	0	*****	0	1	0.0
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	3	0.0	0	3	0.0	0	1	0.0	0	2	0.0
1.5- 2.0	0	2	0.0	0	2	0.0	2	2	100.0	0	0	*****
2.0- 2.5	0	5	0.0	0	5	0.0	2	3	66.7	0	2	0.0
2.5- 3.0	0	3	0.0	1	3	33.3	1	2	50.0	0	1	0.0
3.0- 3.5	0	3	0.0	0	3	0.0	0	1	0.0	0	2	0.0
3.5- 4.0	0	2	0.0	0	2	0.0	0	2	0.0	0	0	*****
4.0- 4.5	0	3	0.0	0	3	0.0	0	1	0.0	0	2	0.0
4.5- 5.0	0	2	0.0	0	2	0.0	0	1	0.0	0	1	0.0
5.0- 5.5	0	4	0.0	0	4	0.0	2	3	66.7	0	1	0.0
5.5- 6.0	0	2	0.0		2	0.0	0	2	0.0	0	0	*****
6.0- 7.0	1	4	25.0	1	4	25.0	0	1	0.0	1	3	33.3
7.0- 8.0	0	10	0.0	1	9	11.1	1	2	50.0	0	3	0.0
8.0- 10.0	1	18	5.6	4	18	22.2	1	4	25.0	0	8	0.0
10.0- 12.0	1	13	7.7	2	13	15.4	0	3	0.0	0	2	0.0
12.0- 14.0	0	3	0.0	0	3	0.0	0	0	*****	0	0	*****
14.0- 16.0	3	14	21.4	4	14	28.6	1	4	25.0	0	2	0.0
16.0- 18.0	4	6	66.7	3	6	50.0	1	1	100.0	0	0	*****
18.0- 20.0	2	7	28.6	2	7	28.6	0	1	0.0	0	2	0.0
20.0- 25.0	5	7	71.4	5	7	71.4	1	1	100.0	0	3	0.0
25.0- 30.0	4	7	57.1	4	7	57.1	0	1	0.0	0	0	*****
30.0- 40.0	2	3	66.7	2	3	66.7	0	1	0.0	0	0	*****
40.0- 50.0	0	2	0.0	1	2	50.0	0	1	0.0	0	0	*****
50.0- 65.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
65.0- 80.0	0	1	0.0	0	1	0.0	0	1	0.0	0	0	*****
80.0-100.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
TOTALS:	22	138		30	124		12	39		1	35	

MAR 27, 1984 SYMPTOMS HIROSHIMA - OUTSIDE UNSHIELDED ALL RADIATION TOTAL CASES: 13
NO BURNS SVR MECH

CAL/CM2	VOMITING FIRST DAY			VOMITING 1 TO 5 DAYS			VOMITING AFTER 5 DAYS			DIARRHEA-1 TO 7 DAYS			DIARRHEA AFTER 7 DAYS		
	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.0- 3.5	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
3.5- 4.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.0- 4.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.5- 5.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
5.0- 5.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
5.5- 6.0	1	2	50.0	1	2	50.0	0	2	0.0	1	2	50.0	0	2	0.0
6.0- 7.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
7.0- 8.0	0	3	0.0	1	3	33.3	0	3	0.0	2	3	66.7	0	3	0.0
8.0- 10.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
10.0- 12.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0	1	2	50.0
12.0- 14.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
14.0- 16.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0
16.0- 18.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
18.0- 20.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
20.0- 25.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	1	1	100.0
25.0- 30.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
30.0- 40.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
40.0- 50.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
50.0- 60.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
60.0- 80.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
80.0-100.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
TOTALS:	1	13		2	13		0	13		3	13		2	13	

CAL/CM2	PURPURA/PETECHIAE			SCALP EPILATION			REPRODUCTIVE PROB-FEM			REPRODUCTIVE PROB-MALE		
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.0- 3.5	0	1	0.0	1	1	100.0	0	1	0.0	0	0	*****
3.5- 4.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.0- 4.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.5- 5.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
5.0- 5.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
5.5- 6.0	0	2	0.0	1	2	50.0	0	1	0.0	0	0	*****
6.0- 7.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
7.0- 8.0	0	3	0.0	0	3	0.0	0	0	*****	1	2	50.0
8.0- 10.0	0	1	0.0	0	1	0.0	1	1	100.0	0	0	*****
10.0- 12.0	0	2	0.0	0	2	0.0	1	1	100.0	0	1	0.0
12.0- 14.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
14.0- 16.0	0	2	0.0	0	2	0.0	0	0	*****	0	2	0.0
16.0- 18.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
18.0- 20.0	0	1	0.0	0	1	0.0	0	0	*****	0	1	0.0
20.0- 25.0	0	1	0.0	1	1	100.0	0	0	*****	0	0	*****
25.0- 30.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
30.0- 40.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
40.0- 50.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
50.0- 60.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
60.0- 80.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
80.0-100.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
TOTALS:	0	13		3	13		2	4		1	6	

MAR 27, 1984 SYMPTOMS HIROSHIMA - OUTSIDE UNSHIELDED ALL RADIATION TOTAL CASES: 1395
MOD BURNS NO NECH

CAL/CM2	VOMITING FIRST DAY			VOMITING 1 TO 5 DAYS			VOMITING AFTER 5 DAYS			DIARRHEA-1 TO 7 DAYS			DIARRHEA AFTER 7 DAYS		
	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT
0.0- 0.5	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	1	1	100.0
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	1	10	10.0	1	10	10.0	0	10	0.0	0	10	0.0	2	10	20.0
1.5- 2.0	0	15	0.0	0	15	0.0	1	15	6.7	2	15	13.3	4	15	26.7
2.0- 2.5	1	18	5.6	1	18	5.6	0	18	0.0	3	18	16.7	2	18	11.1
2.5- 3.0	0	7	0.0	0	7	0.0	0	7	0.0	0	7	0.0	0	7	0.0
3.0- 3.5	0	10	0.0	1	10	10.0	1	10	10.0	1	10	10.0	1	10	10.0
3.5- 4.0	0	23	0.0	0	23	0.0	0	23	0.0	4	23	17.4	5	23	21.7
4.0- 4.5	2	30	6.7	2	30	6.7	0	30	0.0	5	33	15.2	1	33	3.0
4.5- 5.0	0	16	0.0	1	16	6.3	0	16	0.0	5	16	31.3	2	16	12.5
5.0- 5.5	0	45	0.0	1	45	2.2	0	45	0.0	4	45	8.9	4	45	8.9
5.5- 6.0	2	41	4.9	3	41	7.3	1	41	2.4	6	43	14.0	4	43	9.3
6.0- 7.0	1	28	3.6	1	28	3.6	1	28	3.6	2	28	7.1	6	28	21.4
7.0- 8.0	3	99	3.0	5	99	5.1	2	99	2.0	5	100	5.0	17	100	17.0
8.0- 10.0	10	256	3.9	11	256	4.3	11	256	4.3	13	262	5.0	42	262	16.0
10.0- 12.0	38	328	11.6	50	328	15.2	25	328	7.6	32	339	9.4	71	339	20.9
12.0- 14.0	15	101	14.9	15	101	14.9	5	101	5.0	5	116	4.3	25	116	21.6
14.0- 16.0	7	74	9.5	7	74	9.5	3	74	4.1	3	76	3.9	14	76	18.4
16.0- 18.0	22	48	45.8	22	48	45.8	1	48	2.1	5	50	10.0	13	50	26.0
18.0- 20.0	8	46	17.4	8	46	17.4	4	46	8.7	2	50	4.0	16	50	32.0
20.0- 25.0	31	69	44.9	35	69	50.7	4	69	5.8	12	67	17.9	15	67	22.4
25.0- 30.0	12	45	26.7	13	45	28.9	3	45	6.7	5	44	11.4	12	44	27.3
30.0- 40.0	1	11	9.1	1	11	9.1	0	11	0.0	1	12	8.3	1	12	8.3
40.0- 50.0	1	3	33.3	2	3	66.7	0	3	0.0	0	3	0.0	1	3	33.3
50.0- 60.0	1	1	100.0	1	1	100.0	0	1	0.0	0	1	0.0	1	1	100.0
60.0- 80.0	0	0	*****	0	0	*****	0	0	*****	0	1	0.0	0	1	0.0
80.0-100.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
TOTALS:	156	1326		181	1325		62	1325		115	1370		260	1370	

CAL/CM2	PURPURA/PETECHIAE			SCALP EPILATION			REPRODUCTIVE PROB-FEM			REPRODUCTIVE PROB-MALE		
	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT
0.0- 0.5	0	1	0.0	0	1	0.0	0	0	*****	0	1	0.0
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	10	0.0	0	10	0.0	0	1	0.0	0	9	0.0
1.5- 2.0	0	15	0.0	0	15	0.0	1	8	12.5	0	6	0.0
2.0- 2.5	0	18	0.0	0	18	0.0	4	9	44.4	0	9	0.0
2.5- 3.0	0	7	0.0	0	7	0.0	1	4	25.0	0	3	0.0
3.0- 3.5	0	10	0.0	0	10	0.0	3	4	75.0	0	5	0.0
3.5- 4.0	1	23	4.3	0	23	0.0	4	10	40.0	1	13	7.7
4.0- 4.5	2	33	6.1	8	33	24.2	5	9	55.6	0	21	0.0
4.5- 5.0	0	16	0.0	1	16	6.3	2	8	25.0	0	5	0.0
5.0- 5.5	1	45	2.2	1	45	2.2	5	21	23.8	1	24	4.2
5.5- 6.0	0	43	0.0	7	42	16.7	5	13	38.5	1	23	4.3
6.0- 7.0	1	28	3.6	3	27	11.1	3	8	37.5	0	12	0.0
7.0- 8.0	2	103	1.9	20	103	19.4	7	16	43.8	0	39	0.0
8.0- 10.0	9	265	3.4	47	262	17.9	24	57	42.1	4	79	5.1
10.0- 12.0	22	341	6.5	90	341	26.4	25	73	34.2	2	25	8.0
12.0- 14.0	10	117	8.5	44	116	37.9	7	17	41.2	0	23	0.0
14.0- 16.0	8	77	10.4	26	77	33.8	7	12	58.3	1	8	12.5
16.0- 19.0	9	50	18.0	29	49	59.2	7	13	53.8	0	3	0.0
18.0- 20.0	11	49	22.9	29	50	58.0	2	9	22.2	2	13	15.4
20.0- 25.0	27	67	40.3	56	69	81.2	7	30	23.3	0	7	0.0
25.0- 30.0	14	45	31.1	31	46	67.4	5	12	41.7	0	20	0.0
30.0- 40.0	0	11	0.0	8	10	80.0	0	2	0.0	0	5	0.0
40.0- 50.0	1	3	33.3	2	3	66.7	0	1	0.0	0	1	0.0
50.0- 60.0	1	1	100.0	1	1	100.0	1	1	100.0	0	0	*****
60.0- 80.0	0	1	0.0	1	1	100.0	0	0	*****	0	0	*****
80.0-100.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
TOTALS:	119	1378		404	1375		125	338		12	354	

MAR 27, 1984 SYMPTOMS HIROSHIMA - OUTSIDE UNSHIELDED ALL RADIATION TOTAL CASES: 283
MOD BURNS MOD MECH

CAL/CM2	VOMITING FIRST DAY			VOMITING 1 TO 5 DAYS			VOMITING AFTER 5 DAYS			DIARRHEA-1 TO 7 DAYS			DIARPHEA AFTER 7 DAYS		
	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	1	1	100.0	1	1	100.0	0	1	0.0	0	1	0.0	0	1	0.0
3.0- 3.5	0	1	0.0	1	1	100.0	0	1	0.0	0	2	0.0	0	2	0.0
3.5- 4.0	0	4	0.0	0	4	0.0	0	4	0.0	2	4	50.0	0	4	0.0
4.0- 4.5	0	0	*****	0	0	*****	0	0	*****	0	1	0.0	0	1	0.0
4.5- 5.0	0	3	0.0	1	3	33.3	0	3	0.0	1	3	33.3	2	3	66.7
5.0- 5.5	1	7	14.3	1	7	14.3	0	7	0.0	2	7	28.6	0	7	0.0
5.5- 6.0	1	7	14.3	1	7	14.3	0	7	0.0	1	7	14.3	0	7	0.0
6.0- 7.0	0	2	0.0	0	2	0.0	1	2	50.0	0	3	0.0	1	3	33.3
7.0- 8.0	1	16	6.3	1	16	6.3	1	16	6.3	1	16	6.3	4	16	25.0
8.0- 10.0	2	39	5.1	2	39	5.1	1	39	2.6	2	40	5.0	12	40	30.0
10.0- 12.0	3	47	6.4	5	47	10.6	4	47	8.5	7	48	14.6	15	48	31.3
12.0- 14.0	1	35	2.9	1	35	2.9	1	35	2.9	3	37	8.1	14	37	37.8
14.0- 16.0	2	16	12.5	2	16	12.5	1	16	6.3	0	16	0.0	6	16	37.5
16.0- 18.0	3	17	17.6	3	17	17.6	3	17	17.6	1	16	6.3	6	16	37.5
18.0- 20.0	3	17	17.6	3	17	17.6	0	17	0.0	2	18	11.1	6	18	33.3
20.0- 25.0	12	25	48.0	12	25	48.0	1	25	4.0	3	27	11.1	12	27	44.4
25.0- 30.0	10	18	55.6	10	18	55.6	0	18	0.0	0	20	0.0	6	20	30.0
30.0- 40.0	2	8	25.0	2	8	25.0	0	8	0.0	1	8	12.5	2	8	25.0
40.0- 50.0	0	1	0.0	0	1	0.0	1	1	100.0	0	2	0.0	1	2	50.0
50.0- 60.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
60.0- 80.0	0	1	0.0	0	1	0.0	1	1	100.0	0	1	0.0	1	1	100.0
80.0-100.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	1	1	100.0
TOTALS:	42	266		46	266		15	266		26	278		89	278	

CAL/CM2	PURPURA/PETECHIAE			SCALP EPILATION			REPRODUCTIVE PROB-FEM			REPRODUCTIVE PROB-MALE		
	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	0	1	0.0	0	1	0.0	0	0	*****	0	1	0.0
3.0- 3.5	0	2	0.0	0	2	0.0	0	0	*****	0	1	0.0
3.5- 4.0	0	4	0.0	1	4	25.0	0	1	0.0	1	3	33.3
4.0- 4.5	1	1	100.0	1	1	100.0	0	0	*****	0	0	*****
4.5- 5.0	0	3	0.0	2	3	66.7	0	2	0.0	0	1	0.0
5.0- 5.5	0	7	0.0	1	7	14.3	3	5	60.0	0	0	*****
5.5- 6.0	1	7	14.3	2	7	28.6	1	2	50.0	2	4	50.0
6.0- 7.0	1	3	33.3	1	3	33.3	0	0	*****	0	1	0.0
7.0- 8.0	1	16	6.3	3	16	18.8	0	4	0.0	0	4	0.0
8.0- 10.0	3	41	7.3	10	41	24.4	4	7	57.1	1	11	9.1
10.0- 12.0	4	47	8.5	17	47	36.2	3	9	33.3	0	5	0.0
12.0- 14.0	7	38	18.4	11	36	30.6	0	3	0.0	0	5	0.0
14.0- 16.0	2	16	12.5	5	16	31.3	0	1	0.0	0	0	*****
16.0- 18.0	2	17	11.8	7	17	41.2	1	1	100.0	0	0	*****
18.0- 20.0	6	20	30.0	12	20	60.0	1	3	33.3	2	7	28.6
20.0- 25.0	11	27	40.7	21	27	77.8	2	5	40.0	0	2	0.0
25.0- 30.0	11	20	55.0	18	20	90.0	6	6	100.0	2	7	28.6
30.0- 40.0	2	8	25.0	7	8	87.5	2	4	50.0	0	2	0.0
40.0- 50.0	2	2	100.0	2	2	100.0	0	0	*****	0	0	*****
50.0- 60.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
60.0- 80.0	0	1	0.0	0	1	0.0	0	0	*****	0	0	*****
80.0-100.0	0	1	0.0	1	1	100.0	0	0	*****	0	1	0.0
TOTALS:	54	282		122	280		23	53		8	55	

MAR 27, 1984 SYMPTOMS HIROSHIMA - OUTSIDE UNSHIELDED ALL RADIATION TOTAL CASES: 13
MOD BURNS SVR MECH

CAL/CM2	VOMITING FIRST DAY			VOMITING 1 TO 5 DAYS			VOMITING AFTER 5 DAYS			DIARRHEA 1 TO 7 DAYS			DIARRHEA AFTER 7 DAYS		
	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.0- 3.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.5- 4.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.0- 4.5	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
4.5- 5.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
5.0- 5.5	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
5.5- 6.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
6.0- 7.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0	1	2	50.0
7.0- 8.0	1	1	100.0	1	1	100.0	0	1	0.0	0	1	0.0	0	1	0.0
8.0- 10.0	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0
10.0- 12.0	0	2	0.0	0	2	0.0	0	2	0.0	1	2	50.0	0	2	0.0
12.0- 14.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
14.0- 16.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
16.0- 18.0	1	1	100.0	1	1	100.0	0	1	0.0	0	1	0.0	0	1	0.0
18.0- 20.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
20.0- 25.0	1	1	100.0	1	1	100.0	0	1	0.0	0	1	0.0	1	1	100.0
25.0- 30.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
30.0- 40.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
40.0- 50.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
50.0- 60.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
60.0- 80.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
80.0-100.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
TOTALS:	3	13		3	13		0	13		1	13		2	13	

CAL/CM2	PURPURA/PETECHIAE			SCALP EPILATION			REPRODUCTIVE PROB-FEM			REPRODUCTIVE PROB-MALE		
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.0- 3.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.5- 4.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.0- 4.5	1	1	100.0	0	1	0.0	0	0	*****	0	1	0.0
4.5- 5.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
5.0- 5.5	0	1	0.0	0	1	0.0	0	0	*****	0	1	0.0
5.5- 6.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
6.0- 7.0	0	2	0.0	1	2	50.0	2	2	100.0	0	0	*****
7.0- 8.0	0	1	0.0	1	1	100.0	1	1	100.0	0	0	*****
8.0- 10.0	0	3	0.0	1	3	33.3	1	2	50.0	0	0	*****
10.0- 12.0	0	2	0.0	0	2	0.0	0	0	*****	0	2	0.0
12.0- 14.0	0	1	0.0	0	1	0.0	0	0	*****	0	1	0.0
14.0- 16.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
16.0- 18.0	0	1	0.0	1	1	100.0	0	1	0.0	0	0	*****
18.0- 20.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
20.0- 25.0	1	1	100.0	1	1	100.0	1	1	100.0	0	0	*****
25.0- 30.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
30.0- 40.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
40.0- 50.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
50.0- 60.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
60.0- 80.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
80.0-100.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
TOTALS:	2	13		5	13		5	7		0	5	

SYMPTOMS HIROSHIMA - OUTSIDE UNSHIELDED ALL RADIATION TOTAL CASES: 1011
SVR BURNS NO MECH

CAL/CM2	VOMITING FIRST DAY			VOMITING 1 TO 5 DAYS			VOMITING AFTER 5 DAYS			DIARRHEA-1 TO 7 DAYS			DIARRHEA AFTER 7 DAYS		
	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
1.5- 2.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
2.0- 2.5	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0
2.5- 3.0	1	5	20.0	1	5	20.0	0	5	0.0	1	5	20.0	2	5	40.0
3.0- 3.5	0	8	0.0	1	8	12.5	0	8	0.0	1	8	12.5	0	8	0.0
3.5- 4.0	5	26	19.2	5	26	19.2	0	26	0.0	7	28	25.0	4	28	14.3
4.0- 4.5	2	25	8.0	4	25	16.0	0	25	0.0	2	25	8.0	4	25	16.0
4.5- 5.0	3	28	10.7	4	28	14.3	1	28	3.6	1	28	3.6	9	28	32.1
5.0- 5.5	7	100	7.0	8	100	8.0	2	100	2.0	14	100	14.0	14	100	14.0
5.5- 6.0	5	70	7.1	6	70	8.6	3	70	4.3	7	70	10.0	10	70	14.3
6.0- 7.0	2	50	4.0	3	50	6.0	4	50	8.0	5	50	10.0	7	50	14.0
7.0- 8.0	6	75	8.0	6	75	8.0	2	75	2.7	9	76	11.8	12	76	15.8
8.0- 10.0	28	238	11.8	33	238	13.9	12	238	5.0	20	240	8.3	56	240	23.3
10.0- 12.0	11	115	9.6	12	115	10.4	3	115	2.6	11	116	9.5	16	116	13.8
12.0- 14.0	14	71	19.7	14	71	19.7	5	71	7.0	9	72	12.5	20	72	27.8
14.0- 16.0	10	52	19.2	10	52	19.2	2	52	3.8	4	52	7.7	19	52	36.5
16.0- 18.0	6	31	19.4	6	31	19.4	1	31	3.2	4	31	12.9	4	31	12.9
18.0- 20.0	9	31	29.0	9	31	29.0	4	31	12.9	3	32	9.4	7	32	21.9
20.0- 25.0	6	24	25.0	6	24	25.0	3	24	12.5	3	26	11.5	9	26	34.6
25.0- 30.0	2	18	11.1	2	18	11.1	1	18	5.6	3	18	16.7	2	18	11.1
30.0- 40.0	4	10	40.0	4	10	40.0	1	10	10.0	3	10	30.0	2	10	20.0
40.0- 50.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
50.0- 60.0	0	3	0.0	0	3	0.0	1	3	33.3	0	3	0.0	0	3	0.0
60.0- 80.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
80.0-100.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
TOTALS:	121	936		134	986		45	906		107	996		197	996	

CAL/CM2	PURPURA/PETECHIAE			SCALP EPILATION			REPRODUCTIVE PROB-FEM			REPRODUCTIVE PROB-MALE		
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	1	0.0	0	1	0.0	0	0	*****	0	1	0.0
1.5- 2.0	0	1	0.0	0	1	0.0	0	0	*****	0	1	0.0
2.0- 2.5	1	3	33.3	0	3	0.0	1	2	50.0	0	1	0.0
2.5- 3.0	0	5	0.0	0	5	0.0	1	1	100.0	0	4	0.0
3.0- 3.5	0	8	0.0	1	8	12.5	2	5	40.0	0	3	0.0
3.5- 4.0	0	28	0.0	3	28	10.7	5	16	31.3	1	12	8.3
4.0- 4.5	2	25	8.0	2	25	8.0	5	11	45.5	2	14	14.3
4.5- 5.0	0	28	0.0	3	28	10.7	10	17	58.8	0	12	0.0
5.0- 5.5	0	100	0.0	8	100	8.0	17	54	31.5	9	43	20.9
5.5- 6.0	1	70	1.4	6	70	8.6	21	48	43.8	4	26	15.4
6.0- 7.0	1	50	2.0	5	50	10.0	8	17	47.1	2	25	8.0
7.0- 8.0	1	76	1.3	12	76	15.8	15	19	78.9	3	37	8.1
8.0- 10.0	8	243	3.3	52	243	21.4	44	86	51.2	9	88	10.2
10.0- 12.0	6	117	5.1	35	117	29.9	21	40	52.5	6	36	16.7
12.0- 14.0	5	73	6.8	28	73	38.4	10	18	55.6	4	29	13.8
14.0- 16.0	3	52	5.8	14	51	27.5	6	13	46.2	4	12	33.3
16.0- 18.0	4	31	12.9	13	31	41.9	5	8	62.5	0	13	0.0
18.0- 20.0	4	32	12.5	18	32	56.3	1	3	33.3	1	12	8.3
20.0- 25.0	4	26	15.4	19	26	73.1	5	9	55.6	2	6	33.3
25.0- 30.0	2	18	11.1	10	18	55.6	4	12	33.3	0	5	0.0
30.0- 40.0	1	10	10.0	8	10	80.0	1	2	50.0	2	5	40.0
40.0- 50.0	0	1	0.0	0	1	0.0	1	1	100.0	0	0	*****
50.0- 60.0	0	3	0.0	2	3	66.7	0	0	*****	1	3	33.3
60.0- 80.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
80.0-100.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
TOTALS:	42	1001		239	1000		183	377		50	388	

MAR 27, 1984 SYMPTOMS HIROSHIMA - OUTSIDE UNSHIELDED ALL RADIATION TOTAL CASES: 130
SVR BURNS MOD MECH

CAL/CM2	VOMITING FIRST DAY			VOMITING 1 TO 5 DAYS			VOMITING AFTER 5 DAYS			DIARRHEA-1 TO 7 DAYS			DIARRHEA AFTER 7 DAYS		
	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.0- 3.5	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0
3.5- 4.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
4.0- 4.5	0	5	0.0	0	5	0.0	0	5	0.0	0	5	0.0	0	5	0.0
4.5- 5.0	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0	0	3	0.0
5.0- 5.5	3	16	18.8	3	16	18.8	0	16	0.0	2	16	12.5	2	16	12.5
5.5- 6.0	0	9	0.0	0	9	0.0	1	9	11.1	1	9	11.1	1	9	11.1
6.0- 7.0	0	3	0.0	0	3	0.0	0	3	0.0	1	3	33.3	0	3	0.0
7.0- 8.0	0	2	0.0	0	2	0.0	0	2	0.0	1	2	50.0	0	2	0.0
8.0- 10.0	3	23	13.0	3	23	13.0	0	23	0.0	3	23	13.0	5	23	21.7
10.0- 12.0	2	11	18.2	2	11	18.2	1	11	9.1	1	10	10.0	4	10	40.0
12.0- 14.0	3	17	17.6	3	17	17.6	2	17	11.8	2	18	11.1	6	18	33.3
14.0- 16.0	5	8	62.5	5	8	62.5	1	8	12.5	4	8	50.0	0	8	0.0
16.0- 18.0	0	5	0.0	0	5	0.0	0	5	0.0	0	5	0.0	3	5	60.0
18.0- 20.0	1	5	20.0	1	5	20.0	0	5	0.0	0	5	0.0	2	5	40.0
20.0- 25.0	5	9	55.6	6	9	66.7	0	9	0.0	3	9	33.3	2	9	22..
25.0- 30.0	3	4	75.0	3	4	75.0	0	4	0.0	1	4	25.0	2	4	50.0
30.0- 40.0	4	5	80.0	4	5	80.0	0	5	0.0	1	5	20.0	1	5	20.0
40.0- 50.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
50.0- 60.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
60.0- 80.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
80.0-100.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0
TOTALS:	29	129		30	129		5	125		20	129		28	129	

CAL/CM2	PURPURA/PETECHIAE			SCALP EPILATION			REPRODUCTIVE PROB-FEM			REPRODUCTIVE PROB-MALE		
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.0- 3.5	0	2	0.0	1	2	50.0	0	0	*****	0	2	0.0
3.5- 4.0	0	1	0.0	0	1	0.0	0	0	*****	0	1	0.0
4.0- 4.5	0	5	0.0	2	5	40.0	1	2	50.0	0	2	0.0
4.5- 5.0	0	3	0.0	0	3	0.0	1	2	50.0	0	1	0.0
5.0- 5.5	0	16	0.0	0	16	0.0	2	8	25.0	1	8	12.5
5.5- 6.0	0	9	0.0	1	9	11.1	1	4	25.0	0	5	0.0
6.0- 7.0	1	3	33.3	1	3	33.3	1	1	100.0	0	1	0.0
7.0- 8.0	0	2	0.0	0	2	0.0	0	1	0.0	0	1	0.0
8.0- 10.0	2	23	8.7	5	23	21.7	4	5	80.0	0	10	0.0
10.0- 12.0	0	11	0.0	5	11	45.5	2	4	50.0	1	2	50.0
12.0- 14.0	0	18	0.0	10	18	55.6	2	6	33.3	1	5	20.0
14.0- 16.0	1	8	12.5	4	8	50.0	1	3	33.3	1	3	33.3
16.0- 18.0	1	5	20.0	4	5	80.0	0	1	0.0	0	2	0.0
18.0- 20.0	3	5	60.0	3	5	60.0	0	1	0.0	0	1	0.0
20.0- 25.0	4	9	44.4	8	9	88.9	2	3	66.7	0	1	0.0
25.0- 30.0	0	4	0.0	3	4	75.0	1	3	33.3	0	0	*****
30.0- 40.0	0	5	0.0	3	5	60.0	1	2	50.0	0	2	0.0
40.0- 50.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
50.0- 60.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
60.0- 80.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
80.0-100.0	0	1	0.0	0	1	0.0	0	1	0.0	0	0	*****
TOTALS:	12	130		50	130		19	47		4	47	

MAR 27, 1984 SYMPTOMS HIROSHIMA - OUTSIDE UNSHIELDED ALL RADIATION TOTAL CASES: 9
SVR BURNS SVR MECH

CAL/CM2	VOMITING FIRST DAY			VOMITING 1 TO 5 DAYS			VOMITING AFTER 5 DAYS			DIARRHEA 1 TO 7 DAYS			DIARRHEA AFTER 7 DAYS		
	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.0- 3.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.5- 4.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.0- 4.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.5- 5.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
5.0- 5.5	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	1	1	100.0
5.5- 6.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
6.0- 7.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
7.0- 8.0	1	2	50.0	1	2	50.0	0	2	0.0	0	2	0.0	1	2	50.0
8.0- 10.0	0	2	0.0	0	2	0.0	0	2	0.0	0	2	0.0	1	2	50.0
10.0- 12.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
12.0- 14.0	0	2	0.0	0	2	0.0	0	2	0.0	1	2	50.0	1	2	50.0
14.0- 16.0	0	1	0.0	0	1	0.0	0	1	0.0	0	1	0.0	1	1	100.0
16.0- 18.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
18.0- 20.0	0	1	0.0	0	1	0.0	1	1	100.0	1	1	100.0	0	1	0.0
20.0- 25.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
25.0- 30.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
30.0- 40.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
40.0- 50.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
50.0- 60.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
60.0- 80.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
80.0-100.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****	0	0	*****
TOTALS:	1	9		1	9		1	9		2	9		5	9	

CAL/CM2	PURPURA/PETECHIAE			SCALP EPILATION			REPRODUCTIVE PROB-FEM			REPRODUCTIVE PROB-MALE		
	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT	CASES	TOTAL	PERCENT
0.0- 0.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
0.5- 1.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.0- 1.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
1.5- 2.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.0- 2.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
2.5- 3.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.0- 3.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
3.5- 4.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.0- 4.5	0	0	*****	0	0	*****	0	0	*****	0	0	*****
4.5- 5.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
5.0- 5.5	0	1	0.0	1	1	100.0	0	0	*****	0	0	*****
5.5- 6.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
6.0- 7.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
7.0- 8.0	0	2	0.0	0	2	0.0	0	1	0.0	0	1	0.0
8.0- 10.0	0	2	0.0	0	2	0.0	1	1	100.0	0	1	0.0
10.0- 12.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
12.0- 14.0	0	2	0.0	1	2	50.0	1	2	50.0	0	0	*****
14.0- 16.0	0	1	0.0	1	1	100.0	0	0	*****	0	1	0.0
16.0- 18.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
18.0- 20.0	0	1	0.0	1	1	100.0	0	1	0.0	0	0	*****
20.0- 25.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
25.0- 30.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
30.0- 40.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
40.0- 50.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
50.0- 60.0	0	0	*****	0	0	*****	0	0	*****	0	0	*****
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TOTALS:	0	9		4	9		2	5		0	3	

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